



**Report to  
State of Washington  
Joint Legislature Audit and Review Committee**

**Survey of  
General Contractor/Construction  
Management Projects in  
Washington State**

**by**

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**June 6, 2005**

## **Executive Summary**

This survey research and its findings are presented to the State of Washington Joint Legislature Audit and Review Committee (JLARC) to support its audit on General Contractor/Construction Management (GC/CM) practices in Washington State. In 2000, pursuant to RCW 39.10.110 a study was prepared for the State of Washington Alternative Public Works Methods Oversight Committee (APWMOC) evaluating alternative delivery methods utilized in the State of Washington. This report updates the Septelka-Goldblatt 2000 APWMOC Study on GC/CM practices in Washington State.

A total of 108 projects were identified as using GC/CM as their project delivery approach over a period of 13 years, representing a total volume of approximately \$6.6 billion. Thirty-six state and local agencies have utilized GC/CM on one or more projects. State agencies represent 49% of the projects and local agencies represent 51% of the projects.

Based on analysis of responses to a comprehensive survey, the following summarizes the consultants' findings:

- Overall the GC/CM projects studied outperformed WA and national projects delivered using Design-Build-Build in terms of schedule and cost and 98% of the completed projects met or exceeded quality standards.
- The median rate of change was within expected contract modifications range and the projects studied experienced less change than WA public and private DBB projects.
- Response data was insufficient to get a clear picture of claims' frequency or magnitude and appeared to be under-reported. Protests over the GC/CM selection process have been rare. Protests over the subcontractor selection process have been more frequent, but at a level comparable to traditional DBB selection of a low-responsive bid by a responsible bidder. Construction-phase claims occurred for the same reasons that they occur under DBB.
- Five firms typically competed on the average project, with the number of new firms entering GC/CM competitions declining over time. Smaller firms were less successful at winning projects. Seven mid-sized to large Northwest firms or local offices of large national or international firms performed three fourths of the projects.
- GC/CM contractors took good advantage of 1997 changes to RCW 39.10 to self-perform work and prequalify trade subcontractors. Over a third of the projects reported that on average the GC/CM contractors self-performed 2-3 trade packages per project, with a strong preference for performing concrete work. Slightly less than a third of the projects prequalified selected subcontractors (usually 4-5), with electrical and mechanical typically prequalified.

- Slightly more than half of the GC/CM projects contracted a third-party consultant to assist the agency with project management services when it did not have in-house staff to manage the project or it needed advice or assistants in a specialty area.

The results of this survey are limited. Findings are based on self-reported data not verified by the researchers. Each governmental jurisdiction uses different data collection and monitoring methods and systems, and definitions of some key terms may not be consistent across jurisdictions.

Where industry standards or research is available, comparisons are made. However, we had to use caution when interpreting the results. The diversity of the 108 projects in this review and in the comparison studies impact reported averages. Individual projects are affected by many factors such as the amount of renovation work or the level of design or construction complexity. Increasing any one of these three factors tends to affect project performance, alters the delivery speed, or project costs.

Refer to the full report for details.

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**Report to  
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**Survey of General Contractor/Construction Management Projects  
in Washington State**

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## **1. Introduction and Background**

This report and survey analysis are presented to the State of Washington Joint Legislature Audit and Review Committee (JLARC) to support its audit of General Contractor/Construction Management (GC/CM) practices in Washington State. In 2000, pursuant to RCW 39.10.110 a report was prepared for the State of Washington Alternative Public Works Methods Oversight Committee (APWMOC) evaluating alternative delivery methods utilized in the State of Washington. Findings update the Septelka-Goldblatt 2000 APWMOC Study on GC/CM practices in Washington State.

In analyzing the survey results it is important to understand the key differences between projects delivery methods. Is there one right project delivery method? This is the question that many owners ask themselves when faced with choosing a delivery method for their projects. The delivery method selected determines the contractual relationships among the parties, establishes when the parties become engaged, and influences the impact of changes and modifications on project cost. It should not be an arbitrary decision. What worked for one project might not be the best choice for the next. Since each project is different, each time an owner is faced with procuring design and construction they must re-evaluate the project delivery methods available to them and select a method that would be the best fit thus ensuring project success.

### **1.1 Design-Bid-Build**

The design-bid-build (DBB) process procures construction through a competitive process where price is the sole selection factor. The owner holds two separate contracts one for design and another for construction. It is a linear process in that design is completed before the contractor is hired. Some primary reason for choosing design-bid-build would be:

- Low first cost is a priority for an owner and the project schedule is not an issue.
- The project is uncomplicated.
- Procurement laws restrict use of anything else.
- An owner wants to control design.
- There is no need for value engineering or constructability input from the contractor.

### **1.2 General Contractor/Construction Management**

General contractor/construction management (GC/CM) is a delivery system where the contractor is hired during the design process to assist the owner in managing the project by providing pre-construction and construction management services. It is also known as Construction Management at Risk (CMR) or CM/GC. It is called at risk because the contractor providing pre-construction and construction management services is also at risk for building the project. GC/CM is typically procured through a best value selection process. A contractor is selected on qualifications, project approach and other selection factors that would assist the owner in choosing a successful firm. The process can still be competitive and price can be factor, but it is not the sole factor of award.

A project that possesses a high level of technical complexity would be good fit for GC/CM, or a project that is governed by significant schedule constraints. Other reasons for choosing GC/CM might be projects requiring complex phasing, or projects that contain budget limitations requiring a construction cost guarantee during design. CM at risk also allows projects to benefit from value engineering input from the contractor during design, resulting in substantial cost savings.

## **1.4 Overview of RCW 39.10**

In analyzing the results of this study it is important to review the changes made by the Legislature since its initial authorization (1991-2004). These changes have impacted how GC/CM is practiced and expanded the list of jurisdictions authorized to utilize GC/CM. Changes such as the amount of work a GC/CM can self-perform may impact the overall project performance. The following summarizes legislative changes over the last 13 years.

- 1991 GC/CM was first authorized in Washington in 1991. At that time, the Department of General Administration GA and the Department of Corrections (DOC) were permitted to use GC/CM on a pilot basis to construct prison facilities valued over \$10 million. Two prison facilities were constructed using GC/CM in the early 1990s: the Airway Heights Corrections Center and the expansion of the Washington Corrections Center for Women at Purdy.
- 1994 During the 1994 legislative session, a consortium of state agencies and local governments requested that the use of GC/CM be expanded to other agencies. The Legislature responded to this request and RCW 39.10 was enacted, authorizing three state agencies and nine local governments to use GC/CM for a limited set of projects on a pilot basis through June 30, 1997. The authorization to use GC/CM for prison projects was expanded to include up to two pilot projects valued between \$3 million and \$10 million. APWMOC was established.
- 1997 Based on APWMOC's recommendations, the Legislature made a number of improvements:
- GC/CM to be selected on several factors, not only low bid for fee and general conditions
  - GC/CM allowed to self-perform 20% of the work on projects over \$20 million
  - GC/CM selection no later than schematic design completion
  - Subcontractor prequalification allowed
- 2000 The Legislature revised GC/CM as follows:
- GC/CM allowed to self-perform work on any project, not just projects over \$20 million
  - GC/CM self-performance limit raised from 20% to 30%
  - Early release of subcontractor retainage allowed
  - Four K-12 school demonstration projects added
  - K-12 school oversight board formed

- 2001 GC/CM was extended to July 2007. Other changes included:
- Minimum project size increased to from \$10 million to \$12 million
  - APWMOC abolished
  - Five new cities, 4 ports and 10 Public Utility Districts PUD's authorized
  - Public facility districts authorized
  - Subcontractor prequalification criteria detailed
- 2002 The minimum project size was rolled back from \$12 million to \$10 million. Also, 6 more K-12 demonstration projects were authorized.
- 2003 Six additional K-12 demonstration projects were authorized, along with ferry terminal projects and public hospital districts. A public hospital oversight board was appointed to oversee project selection. Also, in bid protest cases, a contract cannot be awarded for two business days.
- 2005 Effective July 24, ESHB 1830 establishes a successor to APWMOC, the Capital Projects Advisory Review Board, and authorizes a GC/CM pilot project.

### **1.3 Research Objectives**

The research objective was to collect data on Washington State projects that utilized the GC/CM alternative project delivery method and to provide analysis to JLARC to assist the committee in evaluating the use of GC/CM. The Septelka/Goldblatt team evaluated GC/CM project performance in 8 key areas:

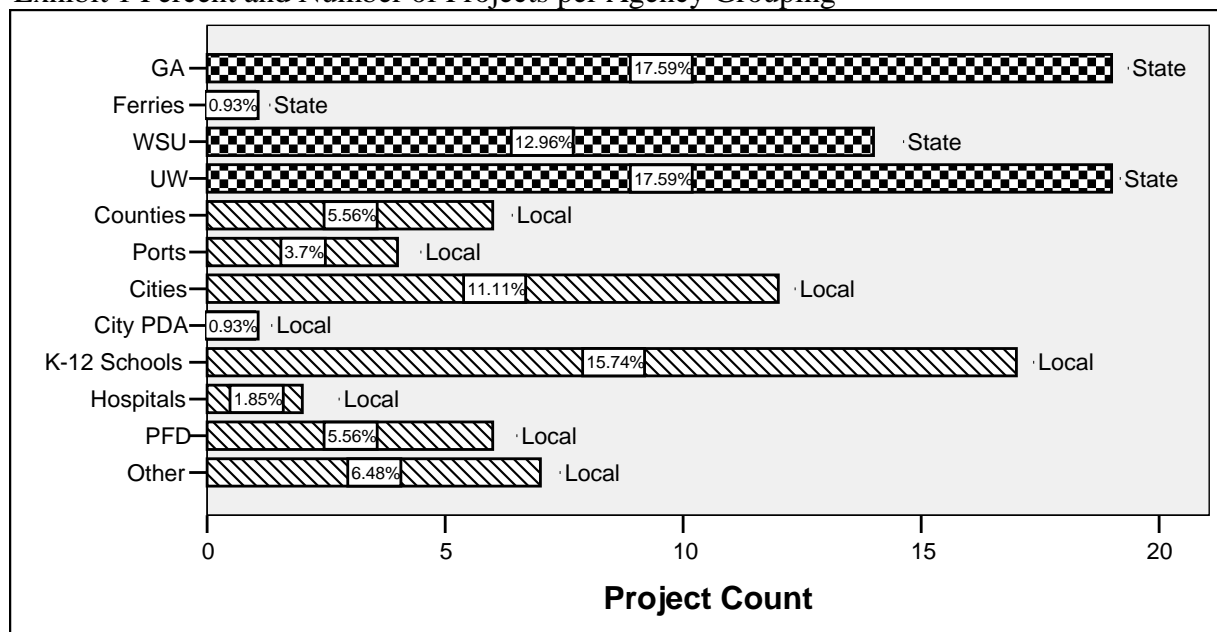
- Schedule performance (Sec. 3.1-3.3)
- Cost performance (Sec. 4.1- 4.3)
- Contract changes (Sec. 5.1-5.3)
- GC/CM selection process (Sec. 6.1-6.3)
- Subcontractor selection process (Sec. 7.1-7.3)
- Use of third party consultants (Sec. 8.1-8.2)
- Project claims and protests filed (Sec. 9.1-9.2)
- Quality performance (Sec. 10.1-10.2)

These 8 areas were selected by the survey team because of the impact they have on overall project performance and the successful use of GC/CM. A structured survey was used to collect specific project data from various state agencies that utilized GC/CM delivery methods. Data collected includes as-planned (budgeted) v. as-built (actual) and GC/CM contract v. final costs. Changes and claims are evaluated as percentages of GC/CM construction contract value. The combined total of the maximum allowable construction costs (MACC), GC/CM fee, and general conditions (GC) was used to determine the GC/CM construction contract dollar value. Where industry standards or research is available, comparisons are made to the results of this survey.

A total of 108 projects were identified as using GC/CM as their project delivery approach over a period of 13 years, representing a total volume of approximately \$6.6 billion. Thirty-six state and local agencies have utilized GC/CM on one or more projects. State agencies represent 49% of the

projects and local agencies represent 51% of the projects. Projects were grouped into 11 jurisdictions authorized by WA State statute and one grouping labeled “other” that included Seattle Public Housing Authority and Pierce Transit. Exhibit 1 shows the percent and number of projects per group.

Exhibit 1 Percent and Number of Projects per Agency Grouping



## 1.5 Research Limits

The results of this survey research are limited. It is based on self-reported data not verified by the researchers. Each governmental jurisdiction uses different data collection and monitoring methods and systems. In addition, definitions of some key terms may not be consistent across jurisdictions.

Where industry standards or research is available, comparisons are made. However, we had to use caution when interpreting the results. The diversity of the 108 projects in this review and in the comparison studies impact reported averages. Individual projects are affected by many factors such as the amount of renovation work or the level of design or construction complexity. Increasing any one of these three factors tends to affect project performance, alters the delivery speed, or project costs.



## **2. About this Investigation**

### **2.1 Research Methods**

The research objective was to collect data on Washington State projects that utilized the GC/CM alternative project delivery method and to provide analysis to JLARC to assist the committee in evaluating the use of GC/CM.

A structured survey was used to collect specific data from projects identified by various public agencies that utilized GC/CM delivery methods. The survey collected objective project information and subjective responses on project performance from agencies/owners. Objective data is impartial information based on project facts, such as actual project start date. Subjective data would be a response to a question, such as “evaluate quality performance.”

#### **2.1.1 Data**

A survey was designed to be completed by the owner/agency’s project representative and asked for objective data and subjective input on project performance in the following 8 areas:

- Schedule performance
- Cost performance
- Contract changes
- GC/CM selection process
- Subcontractor selection process
- Use of third party consultants
- Project claims and protests filed
- Quality performance

Data collection included as-planned vs. as-built and contract vs. final cost. Changes and claims were evaluated as percentages of total GC/CM construction contract value. All the surveys allowed space for additional comments by the evaluator. See Appendix A for a copy of the survey, Appendix C through L for data collected per project, and Appendix O through T for comments made by survey respondents.

#### **2.1.2 Data Collection**

JLARC identified the 36 state agencies, cities, and other public agencies that have used GC/CM as an alternative to design-bid-build project delivery. JLARC contacted each entity and developed a listing of projects that were complete, in the planning phase or under construction that utilized GC/CM as the delivery method. This list of projects became the study population for this investigation. JLARC emailed an electronic survey to all the study participants, and completed surveys were emailed back to the Septelka/Goldblatt research team.

## **2.2 Response to the Survey**

In January 2005, surveys were sent out to agencies involved with the targeted 108 projects to be studied. A total of 91 surveys were returned for an 84% return rate. Not all the surveys provided 100% of the information requested. In cases where a survey was not returned or incomplete, other sources were used to collect project data such as the 2000 APWMOC study. This increased the total project studied to the targeted 108 projects, but information for specific project performance areas was still incomplete in many cases.

### 2.2.1 Public Agencies

Thirty-six public agencies identified a total of 108 projects that have utilized GC/CM as an alternative delivery method. Not all the authorized agencies have chosen to use GC/CM. State agencies represent 49% (53 projects) and local agencies represent 51% (55 projects) of the projects. Projects were grouped into 11 jurisdictions authorized by WA State statute and one grouping labeled “other” that included Seattle Public Housing Authority and Pierce Transit. See Exhibit 1. GA, UW, and WSU represent 48% (52 projects) of the projects studied. See Exhibits 2 and 3 below for number of projects by state and local agency grouping.

Exhibit 2 Project Count by State Agencies (percentages total 100%)

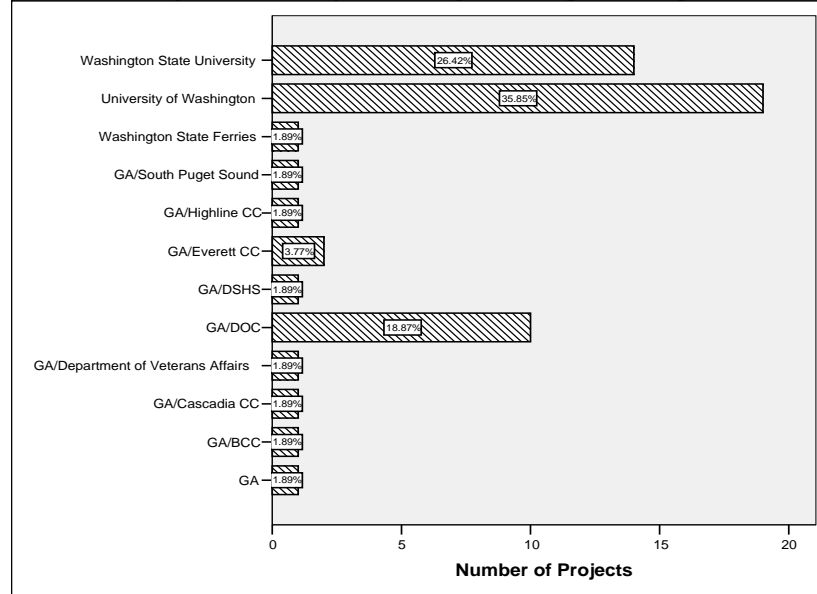
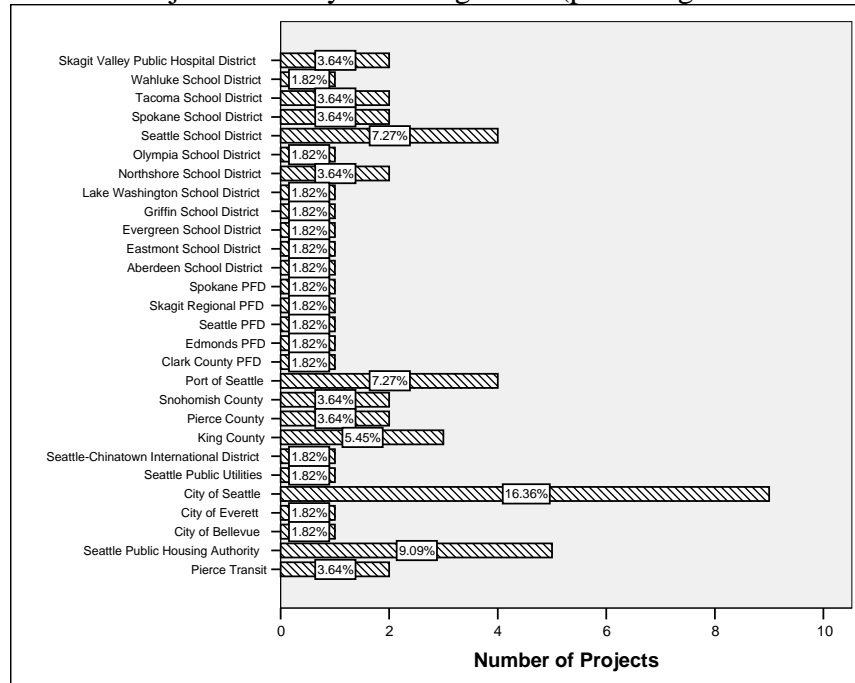


Exhibit 3 Project Count by Local Agencies (percentages total 100%)



### 2.2.2 Project Size

Project sizes in this survey range from \$4 million, GA/DOC's WCC 97-99 Correctional Industries & Master Control/Infirmary Improvements Project to \$639 million, King County's Brightwater Treatment Facility. The total value of the projects equals approximately \$6.6 billion\*, with 49% of the projects under \$40 million. See Exhibit 4 and 5 for the number of projects by project size grouping. Project dollar amounts are not converted to present-day value.

\* This number was estimated, not all the projects provided cost data for this study.

Exhibit 4 Project Size

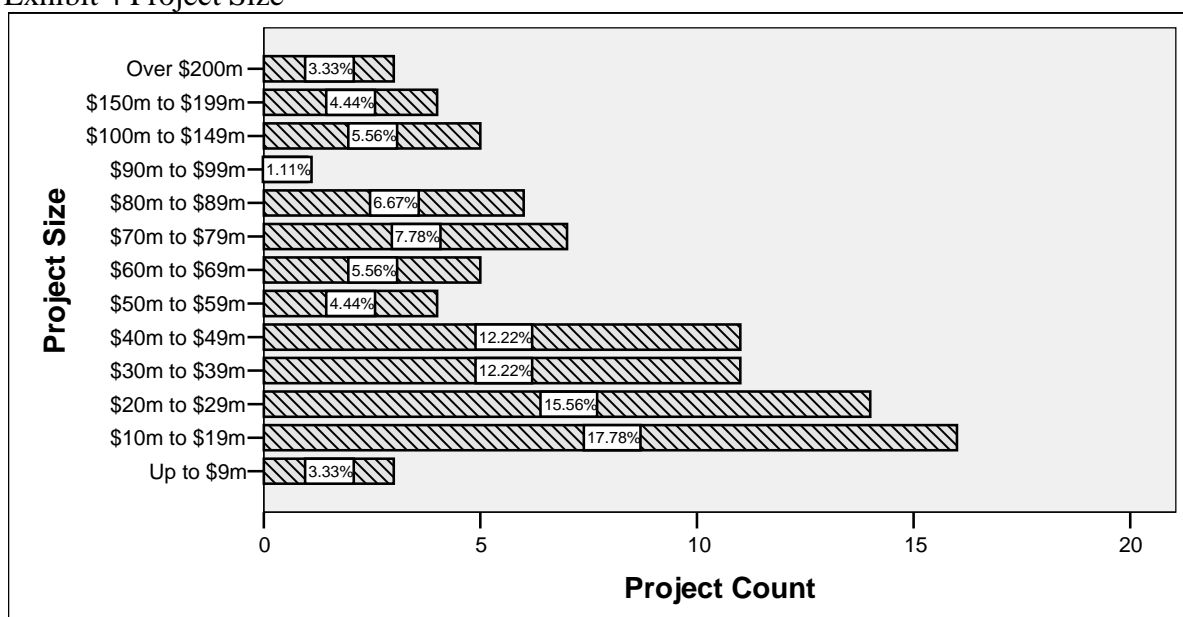
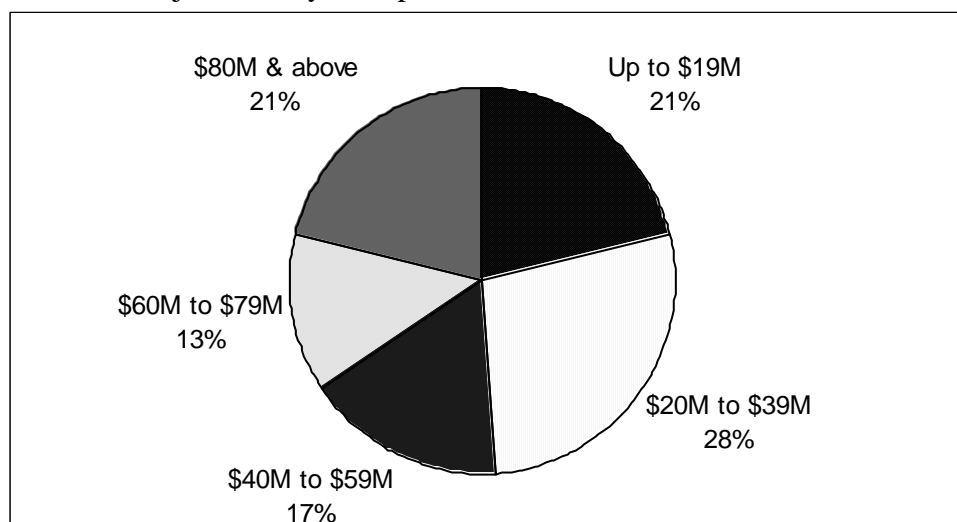


Exhibit 5 Project Size by Group



### 2.2.3 Building and Construction Types

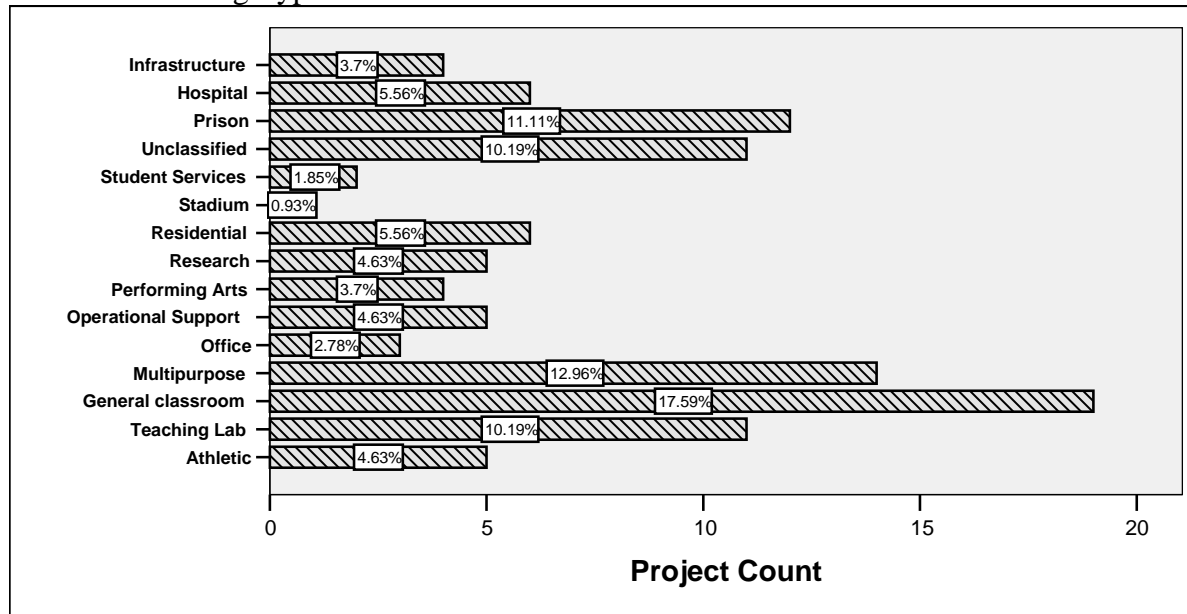
Building types vary and include:

- office buildings,
- treatment plants,
- correctional facilities,
- sports complex,
- parking garages,
- higher education facilities,
- utility plants,
- county and city halls,
- hospitals,
- convention centers,
- police stations,
- a symphony hall,
- K-12 schools, and
- libraries.

Of the surveys returned, 19 were for general classrooms and 11 were teaching labs; combined they represent 30% of the project types. See Exhibit 6 for project count by building type.

Construction type is the predominant facility structural system defining the construction cost. Categories include Heavy – cast in place concrete; Medium – Masonry, protected steel frame, tilt up, heavy timber; Light – wood or light steel stick frame or prefabricated steel. Fifty-five percent of the projects were classified as heavy construction, 34% as medium, and 11% light.

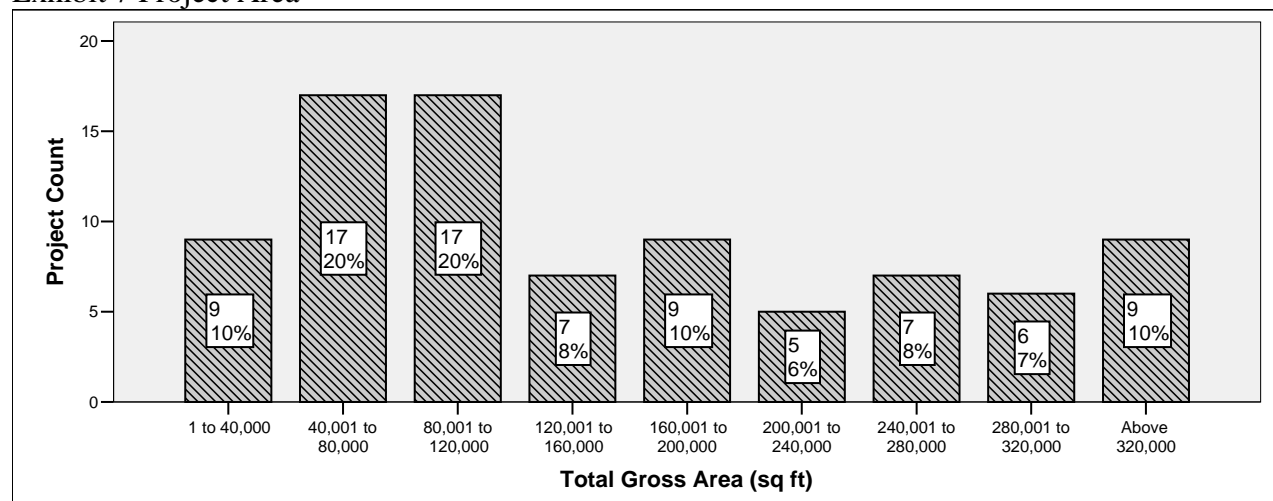
Exhibit 6 Building Type



## 2.2.4 Project Area

The projects' areas ranged from 3,400 gross sf to 1,200,000 sf, with half of the projects under 120,000 sf. Fifty-six percent of the projects were 100% new construction, 12% of the projects were 100% remodel, and 32% of the projects were mixed new and remodel. See Exhibit 7.

Exhibit 7 Project Area



## 2.2.5 Project Status

Of the 108 projects surveyed, 56 (51%) reported that they were complete. Of the 52 projects not complete, 46 (88%) projects have selected their GC/CM contractor and 6 are still pending. The incomplete projects were grouped into three phases: 5 projects in planning, 22 in design, and 22 in construction. Four of the incomplete projects did not provide project status. See Exhibits 8 and 9.

Exhibit 8 Project Status  
All Projects Surveyed

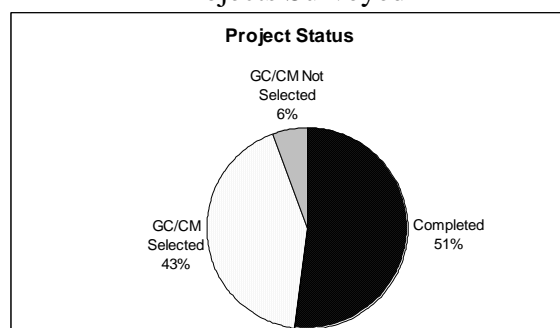
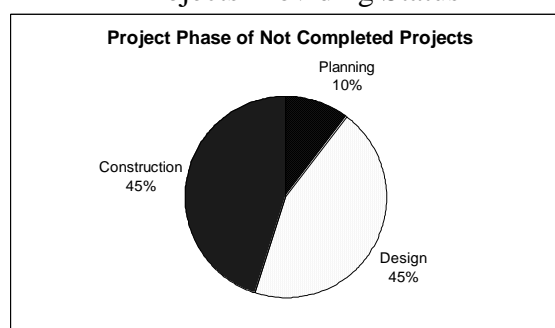
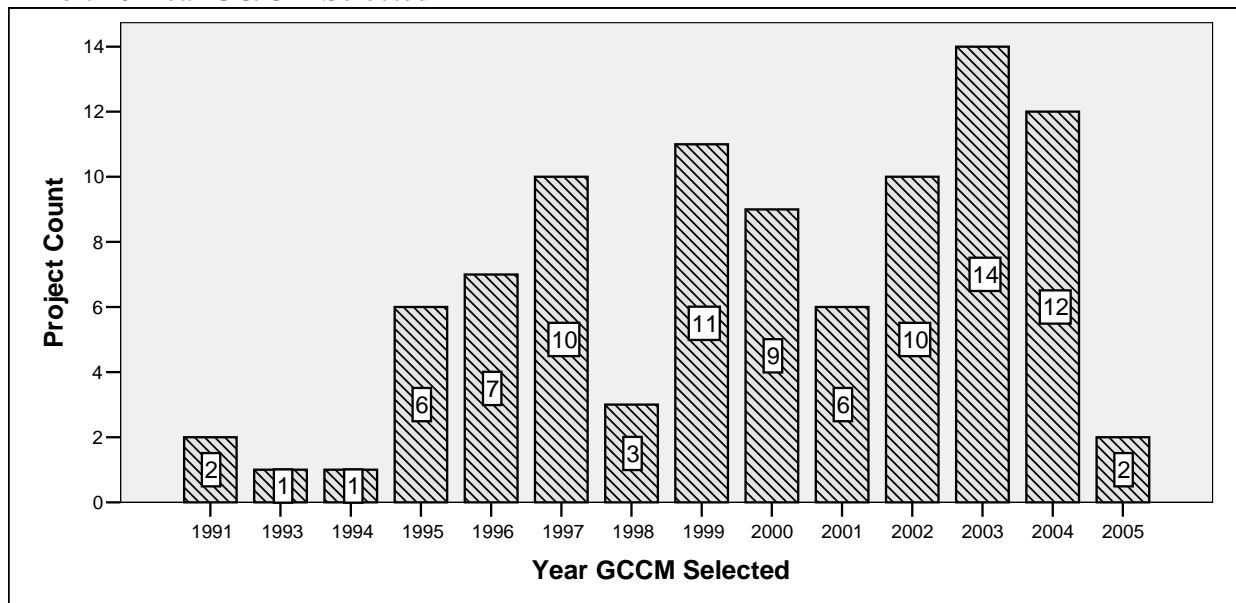


Exhibit 9 Project Phase of Incomplete  
Projects Providing Status



Only 10% of the projects were done prior to the 1997 changes in legislation. Forty-seven percent of the projects were started after 2001's legislative changes. See Exhibit 10. In cases where the data was not reported by the jurisdiction, the researchers approximated the date based on the information supplied by the agency.

Exhibit 10 Year GC/CM Selected



## 2.3 Survey Analysis

The project evaluation survey, completed by the owner/agency's project representative, collects project and performance data in the following eight areas:

- Schedule performance
- Cost performance
- Contract changes
- GC/CM selection process
- Subcontractor selection process
- Use of third party consultants
- Project claims and protests filed
- Quality performance

Data collected includes as-planned (budgeted) v. as-built (actual) and GC/CM contract v. final costs. Changes and claims are evaluated as percentages of GC/CM contract value.

Survey results are limited. Analysis is drawing upon self-reported data and not verified by the researchers. Each governmental jurisdiction uses different data collection and monitoring methods and systems. In addition, definitions of some key terms may not be consistent across jurisdictions.

The Septelka/Goldblatt team used various methods of displaying the data to summarize survey findings, including graphs and tables. Data is reported to JLARC using standard statistical reporting methods such as the mean (average response), median (the response in the middle of a set of responses), and standard deviation (measure of dispersion from the mean). The project population was too small to test for significance or correlation between study sub-groups.

Some numbers are rounded, so the totals may not agree to the sum of the numbers. Such variations are few and insignificant. Also, not every respondent answered every question, so sample sizes vary. Statistics are reported based on valid responses within each set.

It should be noted that the average or mean value can misrepresent the data when evaluating a small and diverse data set. A median is the midpoint of a ranked data set and prevents abnormal averaging that can occur when a few projects have a high or low study value. Therefore, for this study the median value would depict a more accurate picture in summarizing the results. Also, the averages of performance metrics should not be perceived as a reflection of all state and local projects.

Where industry standards or research is available, comparisons are made. However, we had to use caution when interpreting the results. For instances, we have greater confidence contrasting this survey with other studies when taking the 108 project survey as a whole, but when broken down by building type the sample size is too small to draw inferences. The diversity of the projects in this study and in comparison studies impact reported averages. Individual projects are affected by many factors such as the amount of renovation work, design complexity, and construction complexity. Increasing any one of these three factors tends to affect project performance, alters the delivery speed, or project costs.

The Construction Industry Institute (CII) study on project delivery systems is used to benchmark schedule and cost performance. The national CII study included 351 projects, 43% of which were public projects. The study presented empirical comparisons of cost and schedule attributes of design-bid-build (DBB), construction management at risk (CMR), and design-build (DB) delivery methods. Of the 351 national projects, 81 (23%) were delivered using CMR. The CII study did not provide a comparison of delivery systems among public projects. All benchmarking metrics were used for all projects, both public and private.

The Dye report “Case Studies of Major Capital Projects: Final Report,” was used to provide a comparison of DBB projects within Washington State. The Dye report evaluated 10 DBB projects. When comparing findings to the Dye study, JLARC should use some caution because of the small sample size. The average of the DBB performance metrics should not be perceived as a reflection of all state and local projects. The projects studied in both studies are diverse, and project size varies.

Two studies that investigated change growth on Washington State projects are compared to the results of this study. “An Investigation of Change Orders on University of Washington Construction Projects” by Christine Ann Engan analyzed 231 UW projects between 1992 and 1995. The projects studied were all under \$10 million and included renovation, maintenance, and miscellaneous, but no new construction. Since all the projects were less than \$10 million and very early in UW’s authority under RCW 39.10, it can be assumed that all of the work was contracted as DBB.

The second study, “An Investigation of Change Orders in the Private Sector” by Darlene Septelka, analyzed 659 DBB projects and 115 negotiated cost-plus-fixed-fee projects for a private northwest firm between 1993 and 1997. The projects studied ranged from under \$10,000 to \$14 million and included renovation, maintenance, and new construction.

### **3. Schedule Performance**

#### **3.1 Summary**

One of the expected benefits of GC/CM is to fast-track a project when an aggressive project schedule must be met by an agency. For example a prison that needs to be built quickly and on time to deal with overcrowding. Four scheduling metrics were used to define the time taken by the design and construction team to deliver the facility. Schedule measures included schedule growth, construction growth, delivery speed, and construction speed.

#### ***Schedule and Construction Growth Summary***

Schedule growth is the percentage by which the project schedule changed from the original timeline over the life of the project. In our comparisons of original and actual timelines we found that on average the projects took longer than agencies originally planned. However, when asked directly if the project came in on time, the data shows that 71% of the projects finished on schedule. This discrepancy might be due to capital project managers receive approval for adjustments to their completion dates during the life of a project. For responses that reported project schedule overruns, some reasons included delays in issuance of permits, added scope, unforeseen conditions, delays in state funding, and building system failures.

The GC/CM project surveys reported less overall project schedule growth than Washington State and national DBB projects as reported in the Dye and CII studies. This would be expected since the GC/CM method of project delivery allows fast tracking a schedule by overlapping design and construction. In reviewing construction timelines, WA GC/CM projects also experienced less construction schedule growth than WA DBB projects as reported in the Dye study to JLARC.

#### ***Delivery Speed and Construction Speed Summary***

Another performance measure is delivery speed, the rate at which the project team designed and built the facility. The higher the intensity of delivery indicates a better outcome in terms of cost and schedule. WA GC/CM projects outperformed WA DBB projects by 159% as reported in the Dye Study, but WA GC/CM projects underperformed compared to the national CII CMR and DBB projects.

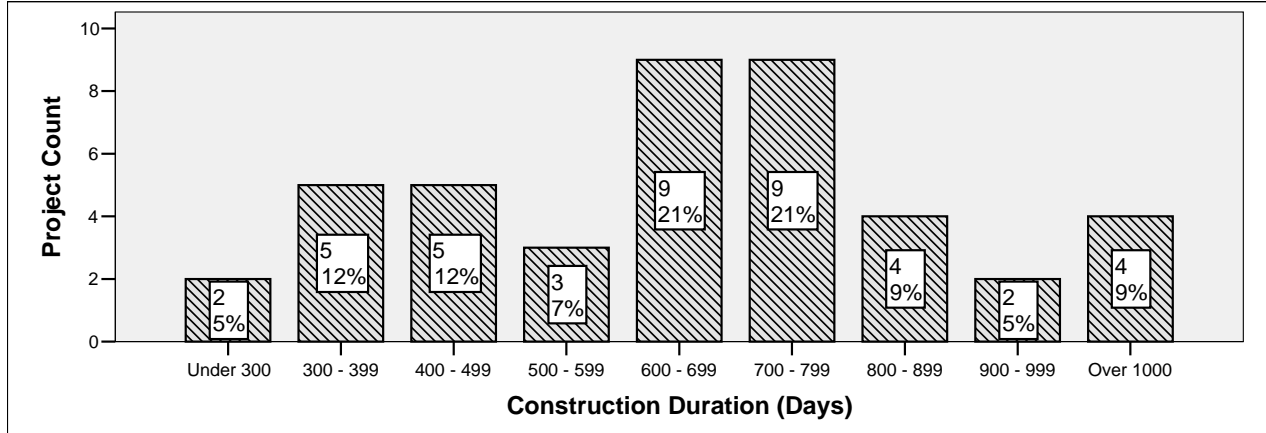
Construction speed is the rate at which the construction team built the facility. WA GC/CM projects outperformed the national CII DBB projects in construction speed, but underperformed compared to the national CII CMR projects. Again, the fact that GC/CM outperformed DBB was to be expected since GC/CM allows for construction to begin as designs are still being completed. There are several reasons why Washington's GC/CM projects might have underperformed compared to the national CII CMR projects including our small sample size, differences in building types, differences in the number of public project included in the CII study, and difference in how GC/CM is practiced.



### 3.2 Response to Survey

Only completed GC/CM projects were analyzed in evaluating schedule performance. This represents 52% of the 108 projects, or 56 projects. Scheduled length varied due to the large variation of project sizes included in the study. Forty-three (77% of completed projects) provided information on schedule durations. Overall design and construction durations varied from 1 to 4 years. Construction durations varied from  $\frac{3}{4}$  of a year to 8 years. Forty-two percent of the projects' construction durations fell between  $1\frac{3}{4}$  to  $2\frac{1}{4}$  years. See Exhibit 11.

Exhibit 11 Construction Duration



### 3.3 Findings

Of the completed projects, 80% (45 projects) responded to the question “Was the project completed on time?” Seventy-one percent (32 projects) of the respondents reported that their project was completed on time. See Exhibit 12 and 13.

Exhibit 12 Percentage of Survey Responses

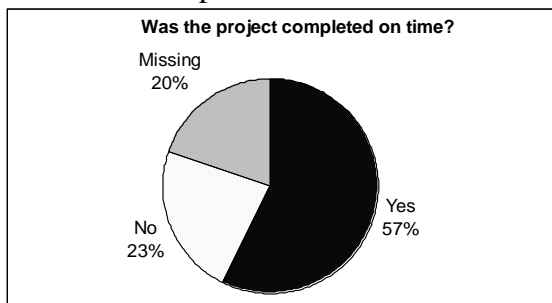
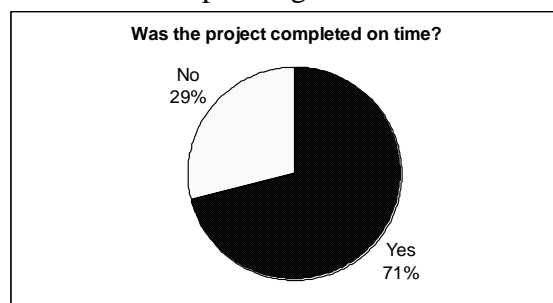


Exhibit 13 Percentage of those Responding



Four scheduling metrics defined the time taken by the facility team and the owner to deliver the facility. Schedule measures included schedule growth, construction growth, delivery speed, and construction speed.

### 3.3.1 Schedule Growth

*Schedule growth* is the percentage by which the schedule grew over the life of the project. A value of 0% or less means the project met or finished ahead of the planned schedule. A value greater than 0% means the time increased from the planned schedule.

$$\text{Schedule Growth (\%)} = \frac{\text{Total Time} - \text{Total As-Planned Time}}{\text{Total As-Planned Time}} \times 100$$

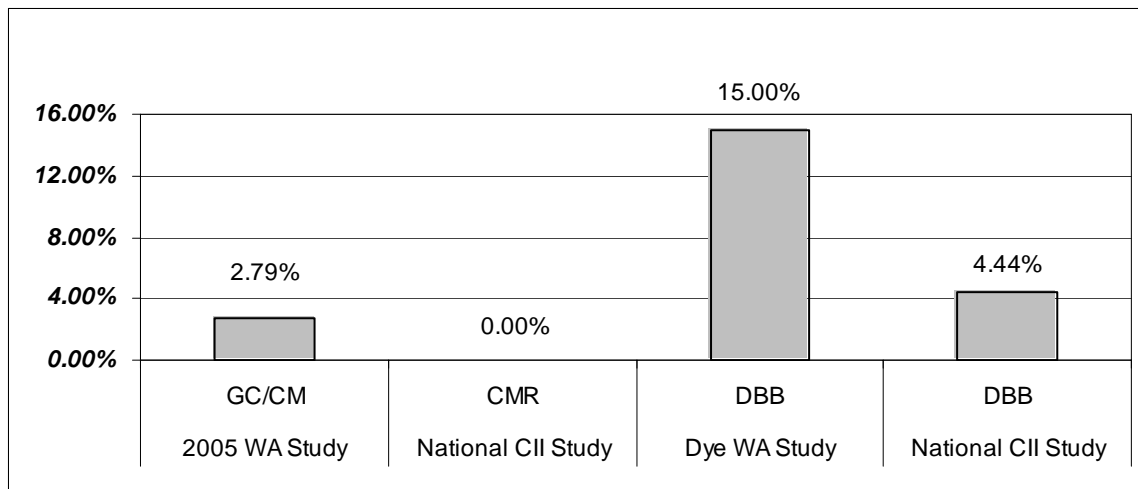
Where:

*Total Time* is the period from the as-built design start date to the as-built construction end date.

*Total As-Planned Time* is the period from the as-planned design start to the as-planned construction end date.

A total of 42 completed projects reported scheduling growth information. The *schedule growth* mean (11.12%) and median (2.79%) were both above 0%, indicating that on average the schedule took longer than planned. Exhibit 14 compares the results to the national CII Study. Our median (2.79%) was higher than national CMR projects (0%), but lower than national DBB projects (4.44%). Our median (2.79%) was also lower than WA's DBB median (15%) reported in the Dye Study to JLARC. This would be expected since the GC/CM method of project delivery allows fast tracking a schedule by overlapping design and construction.

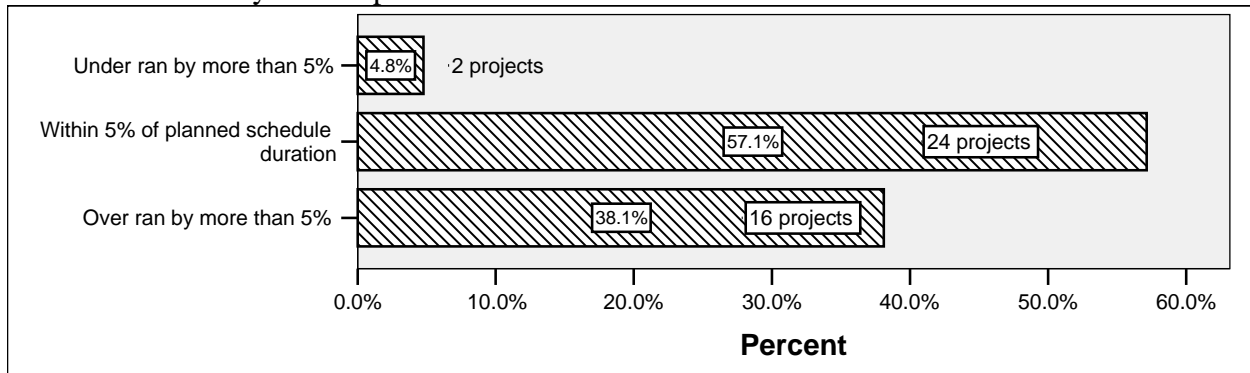
Exhibit 14 Schedule Growth



The highest reported *schedule growth* was 146.3% on UW's Oceanography Research & Training; the lowest 15.49% on GA's Airway Heights Corrections Center. Ten projects (24%) reported no *schedule growth*, 9 projects (22%) finished ahead of planned schedule, and 23 projects (55%) finished later than planned. Of the projects surveyed, 46% met or exceeded schedule expectations despite a 71% response that the projects finished on time. This contrast might be explained by capital project managers receiving approval for adjustments to their completion dates during the life of a project.

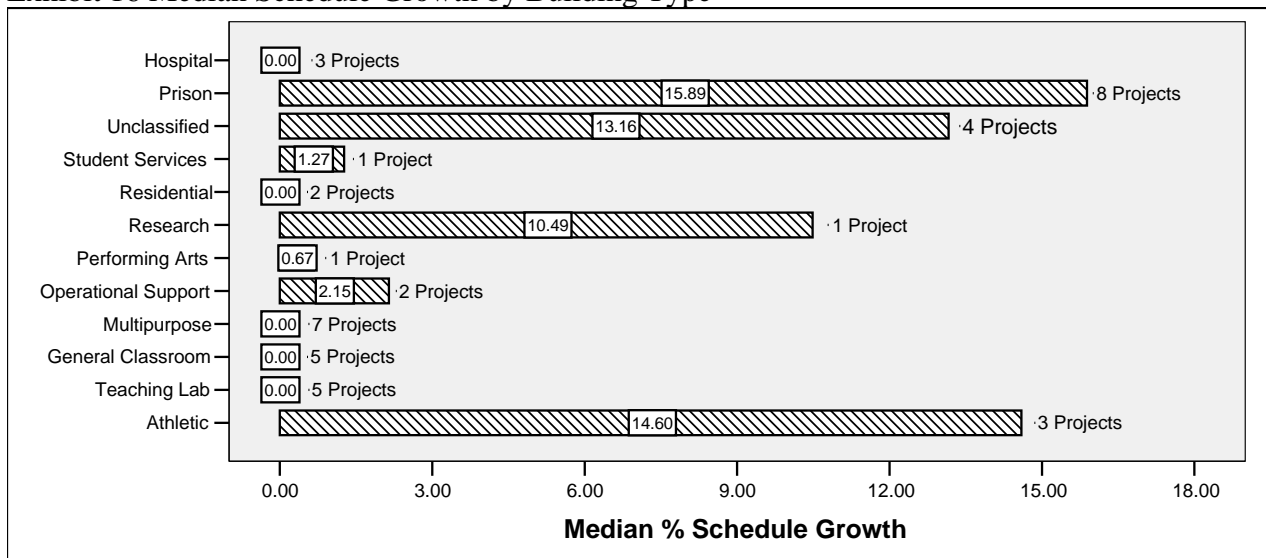
Completion on schedule indicates whether one delivery system consistently provided agencies with a greater schedule certainty. The Septelka/Goldblatt team chose a five percent acceptable level of schedule performance because it was used in the CII Study. Exhibit 15 investigates the percentage of projects whose final schedule duration exceeded the planned schedule by more than 5%, those that fell within 5% of the planned duration, and those that under-ran by more than 5%. Fifty-seven percent of the projects had a 5% certainty of completing on time, slightly higher than reported by the national CII Study for CMR and DBB projects. Less than 5% of the projects experienced significant schedule savings, and 38% of the projects had over 5% schedule growth. Compared to the national CII study, WA GC/CM projects had a lower percentage of under-running and a higher percentage of overrunning by 5%.

Exhibit 15 Certainty of Completion on Time



This study covered a diverse group of project types. Exhibit 16 examines *schedule growth* by building type. Building types that exceeded 5% *schedule growth* are prison, unclassified, research, and athletic facilities.

Exhibit 16 Median Schedule Growth by Building Type



### 3.3.2 Construction Schedule Growth

*Construction schedule growth* is the percentage by which the construction schedule grew over the life of the project. A value of 0% or less means construction met or finished ahead of the planned construction schedule. A value greater than 0% means the time increased from the planned construction schedule.

$$\text{Construction Schedule Growth (\%)} = \frac{\text{Construction Time} - \text{Total As-Planned Construction Time}}{\text{Total As-Planned Construction Time}} \times 100$$

Where:

*Total Construction Time* is the period from the as-built construction start date to the as-built construction end date.

*Total As-Planned Construction Time* is the period from the as-planned construction start to the as-planned construction end date.

A total of 42 completed projects reported scheduling information. The *construction schedule growth* mean (13.85%) and median (4.12%) were both above 0%, indicating that on average the construction schedule took longer than planned. The national CII study did not report construction schedule growth. WA GC/CM projects experienced less construction schedule growth than WA DBB projects (mean 31%, median 19%) reported in the Dye Study to JLARC. See Exhibit 17 for study comparisons.

Exhibit 17 Construction Schedule Growth

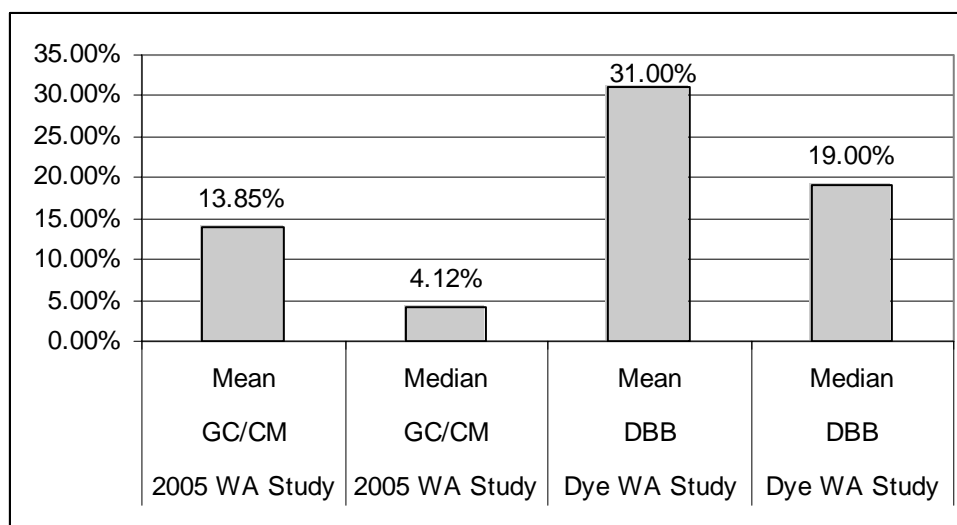
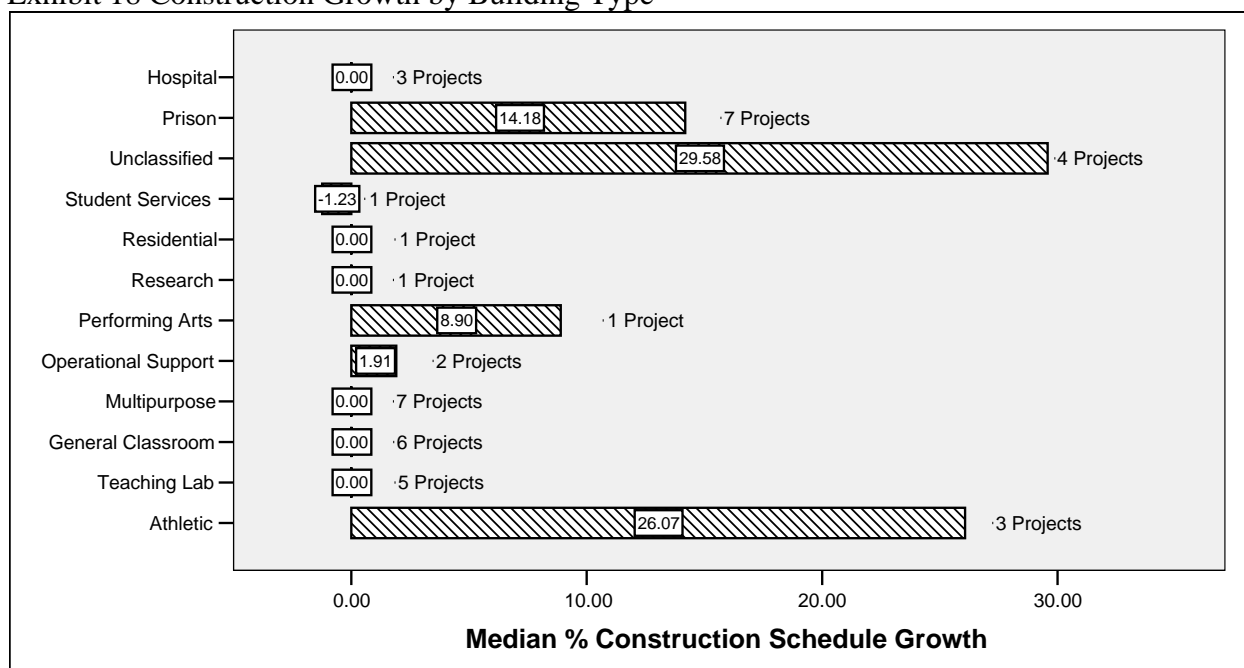


Exhibit 18 examines *construction schedule growth* by building type. Building types that exceeded 5% *construction schedule growth* are prison, unclassified, performing arts, and athletic facilities.

Exhibit 18 Construction Growth by Building Type



### 3.3.3 Delivery Speed

*Delivery speed* is the rate at which the project team designed and built the facility. The higher number represents a better performance. *Delivery speed* was defined as the facility gross square footage divided by the design and construction as-built time.

$$\text{Delivery Speed (sf/day)} = \frac{\text{Area (sf)}}{\text{Total Time (days)}}$$

Where:

*Total Time* is the period from the as-built design start date to the as-built construction end date.

A total of 41 completed projects reported scheduling and project gross area information. The mean Delivery Speed was 134 sf/day and the median was 94. The fastest project was the Port of Seattle's SeaTac Parking Garage (828 sf/day); the slowest project was the City of Seattle's Landsburg Fish Passage & Diversion Facility (3.27sf/day) followed by UW School of Communication Addition (22.45sf/day). It would be expected that less complicated project with a large building area such as a parking garage would have a better outcome than a more complex project such as a remodel or addition. Also, unique projects with a small project footprint such as a fish passage would have a low delivery speed.

Exhibit 19 compares *delivery speeds* between studies. WA GC/CM projects had a slower *Delivery speed* than the national CII CMR and DBB projects, 68% slower than CMR and 16% slower than DBB. When comparing to the Dye Study, WA GC/CM projects outperformed WA

DBB projects by 159%. This would be expected since the GC/CM method of project delivery allows fast-tracking a schedule by overlapping design and construction.

*Delivery speed* on a project is affected by the amount of renovation work, design complexity, and construction complexity. Increasing any one of these three factors tends to alter *delivery speed*.

Exhibit 19 Delivery Speed

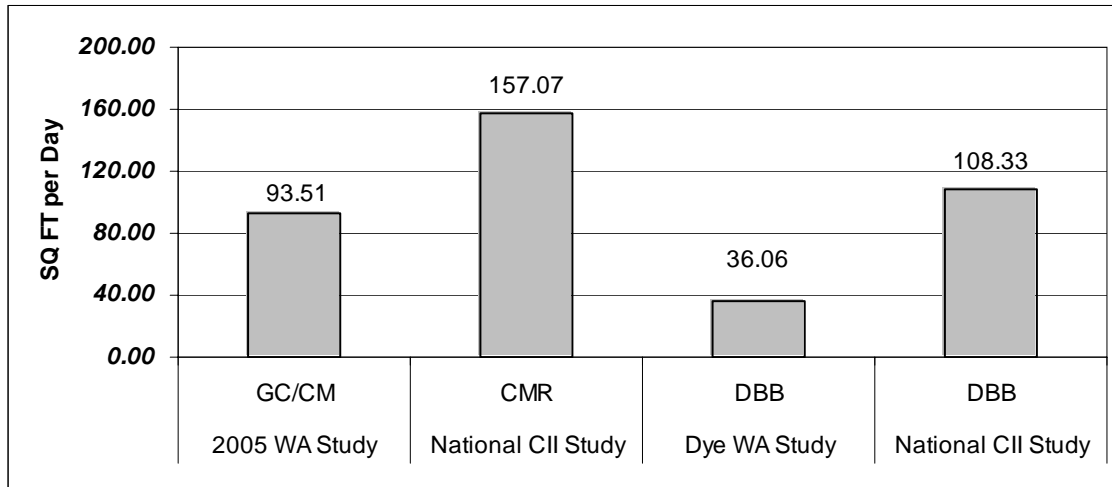
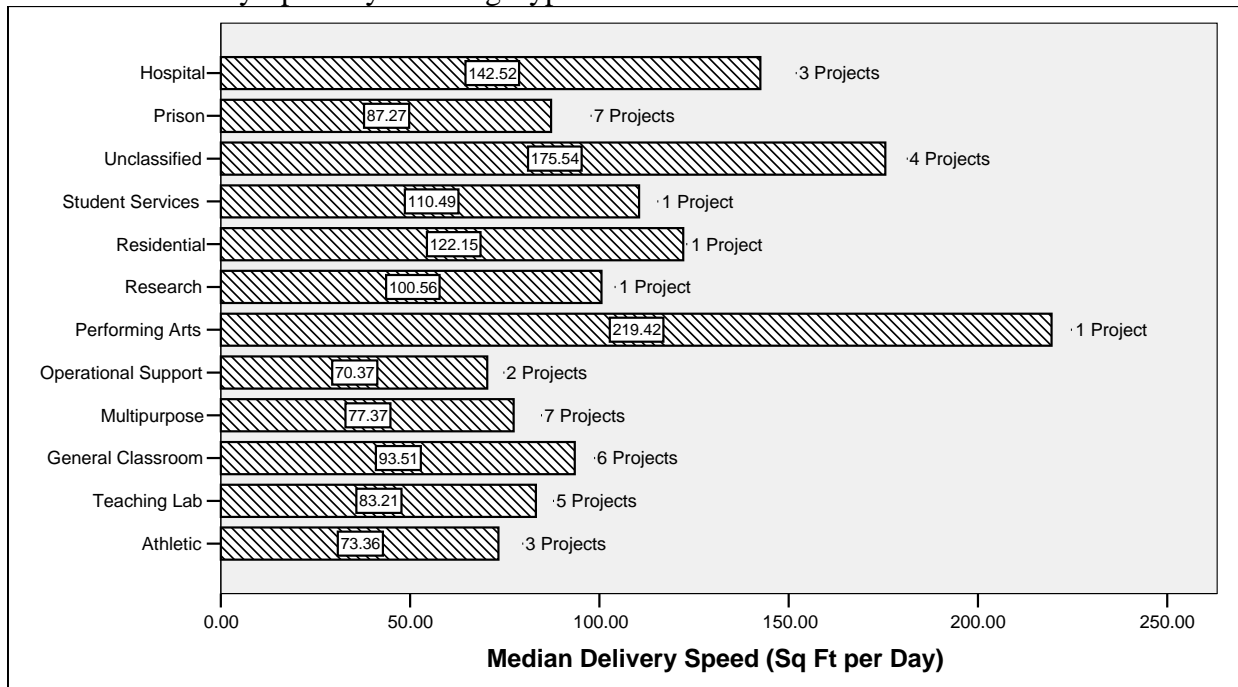


Exhibit 20 evaluates *delivery speed* by building type. Performing art and unclassified facilities outperformed the national CII CMR projects, and hospitals, student services, and residential facilities outperformed the national CII DBB projects.

Exhibit 20 Delivery Speed by Building Type



### 3.3.4 Construction Speed

*Construction speed* was the rate at which the construction team built the facility. The higher number represents a better performance. *Construction speed* was defined by the formula:

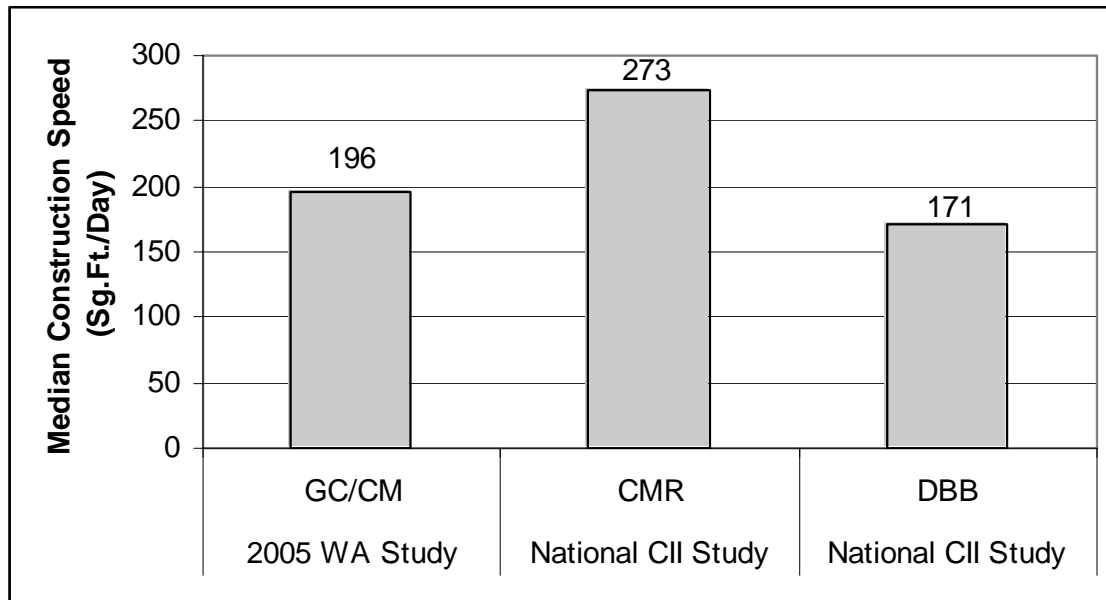
$$\text{Construction Speed (sf/day)} = \frac{\text{Area (sf)}}{\text{Construction Total Time (days)}}$$

Where:

*Construction Total Time* is the period from the as-built construction start date to the as-built construction end date.

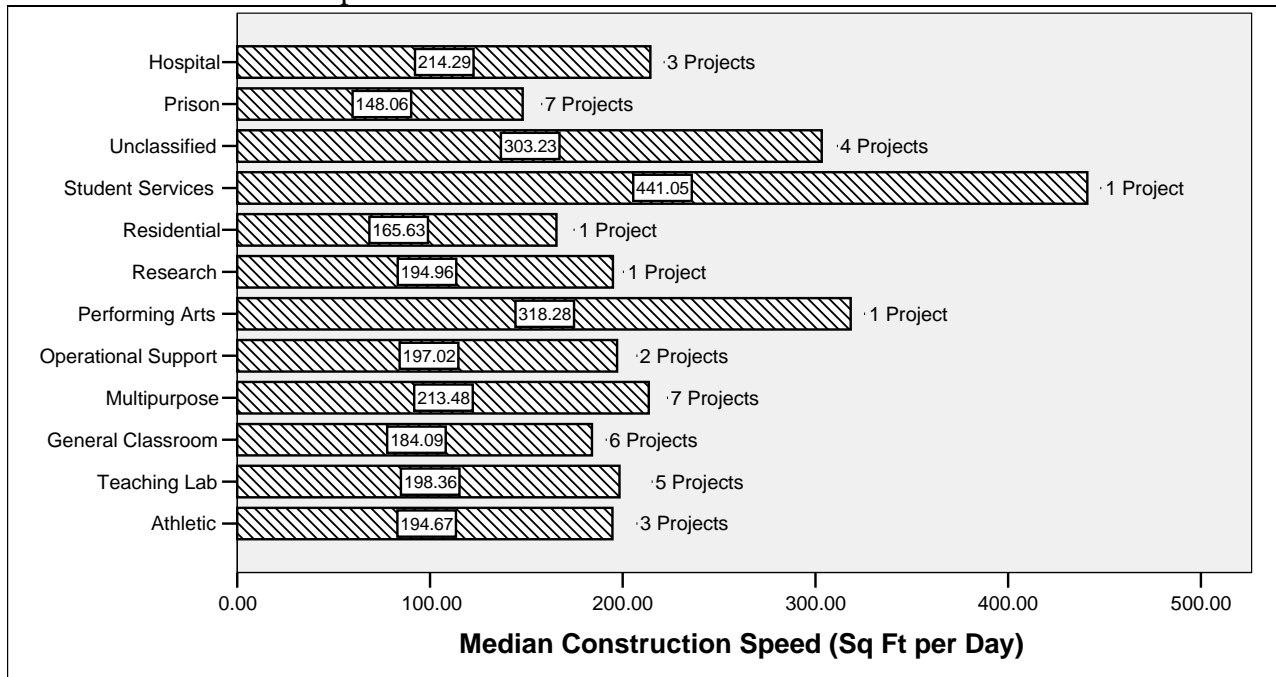
Of the 41 completed projects reporting construction scheduling and project gross area information, the mean *construction speed* was 240 sf/day and the median was 196. Exhibit 21 compares WA GC/CM projects to the national CII study. WA GC/CM projects outperformed the national DBB projects, but underperformed compared to the national CMR projects.

Exhibit 21 Construction Speed



The fastest project was the Port of Seattle's SeaTac Parking Garage (1224sf/day); the slowest project was the Landsburg Fish Passage & Diversion Facility (5sf/day) followed by WCC 97-99 Correctional Industries & Master Control/Infirmary Improvements (26.16sf/day). It would be expected that a less complicated project with a large building area such as a parking garage would have a better outcome than a more complex project such as a remodel or addition. Also, unique projects with a small project footprint such as a fish passage would have a low delivery speed. Exhibit 22 evaluates *construction speed* by building type.

Exhibit 22 Construction Speed





## 4. Cost Performance

### 4.1 Summary

Another of the expected benefits of GC/CM is the potential of lower projects costs. In a GC/CM project the general contractor commits to the construction cost prior to design completion. The earlier a cost commitment is made, the more risk in providing a price commitment since the design is not complete. The contractor negotiates with the owner a construction cost guarantee not to exceed a set price known as the Guaranteed Maximum Construction Cost (GMCC). This is like a DBB project in that if the actual construction cost over-runs the GMCC the contractor is responsible for the difference. What differs is when a contractor under-runs the GMCC the difference is returned to the owner unless stipulated otherwise in the contract.

Four cost measures were used to evaluate cost performance: unit cost, project cost growth, construction contract cost growth, and intensity of delivery (a hybrid of unit cost and schedule measures). This survey provides data on unit cost, but there is no existing unit cost data for WA DBB projects, so comparisons or performance evaluation cannot be made for unit cost.

#### *Project and Construction Contract Cost Growth Summary*

Cost growth is the percentage by which actual project costs changed from budgeted costs over the life of the project. In our comparisons of budgeted and actual costs we found that on average the projects met cost expectations. When asked directly if the project came in per budget, the data shows that 80% of the projects were completed within budget. This difference might be due to capital project managers receiving approval to adjust their budgets during the life of a project. For responses that reported project budget overruns, some reasons included unforeseen conditions, increase in design cost, extreme market condition, hyper-escalation of construction materials, demands of city agencies for right of way improvements, owner requested scope additions, and lack of reviews by the GC/CM.

The GC/CM projects studied reported less project cost growth than WA and national DBB projects as reported in the Dye and CII studies. This would be expected since the GC/CM is involved early during the design process where issues can be identified and solved prior to construction thus having less impact on the project budget.

Construction contract costs include the MACC, fee, and general conditions. On average construction contract costs did not meet expectations. However, WA GC/CM projects did outperform WA DBB projects as reported in the Dye Report. Construction costs not meeting expectations might be explained in that the MACC is negotiated prior to design is complete and the contractor under-estimated the MACC due to inflation on material such as steel, or scope was added after the MACC was negotiated. There is no existing construction contract cost growth data for national projects.

#### *Intensity of Delivery Summary*

Intensity of delivery indicates the unit cost of design and construction completed per unit time. A higher intensity indicates a better outcome in terms of cost and schedule. WA GC/CM projects outperformed national CMR and DBB project as reported by CII. Also, WA GC/CM projects experienced a slightly better outcome than WA DBB projects reported by the Dye Study.

### Contingency Summary

Contingency is set aside to mediate the risks associated with construction such as design errors and omission and unforeseen conditions. The *project/owner contingency* was sufficient to cover project risks for over half of the projects and the *GC/CM contingency* was sufficient to cover the GC/CM's risks on almost all of the projects. Half of the reporting owners or their agents controlled the GC/CM contingency. In addition, half of the reported unused GC/CM contingency was returned to the owner.

### Incentives Summary

An incentive provides a way for an agency to specifically determine the goals for the project and communicate those goals to the contractor. A cost incentive can be paid to a contractor if a predefined performance goal is met, for example no power disruption to an existing facilities or an owner occupied the facility early. Just under half of the projects utilized cost incentives. The average cost incentive awarded was under 1% of the negotiated GC/CM construction contract value.

## 4.2 Response to Survey

Of the completed projects, 80% (45 projects) responded to the question "Was the project completed within budget?" Eighty-four percent (38 projects) reported that their project was completed within budget. See Exhibit 23 and 24.

Exhibit 23 Percentage of Survey Responses

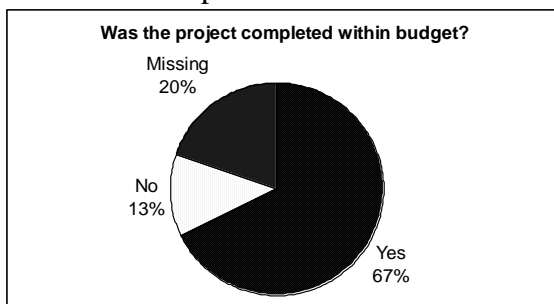
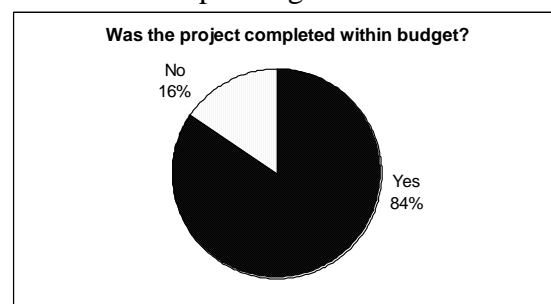
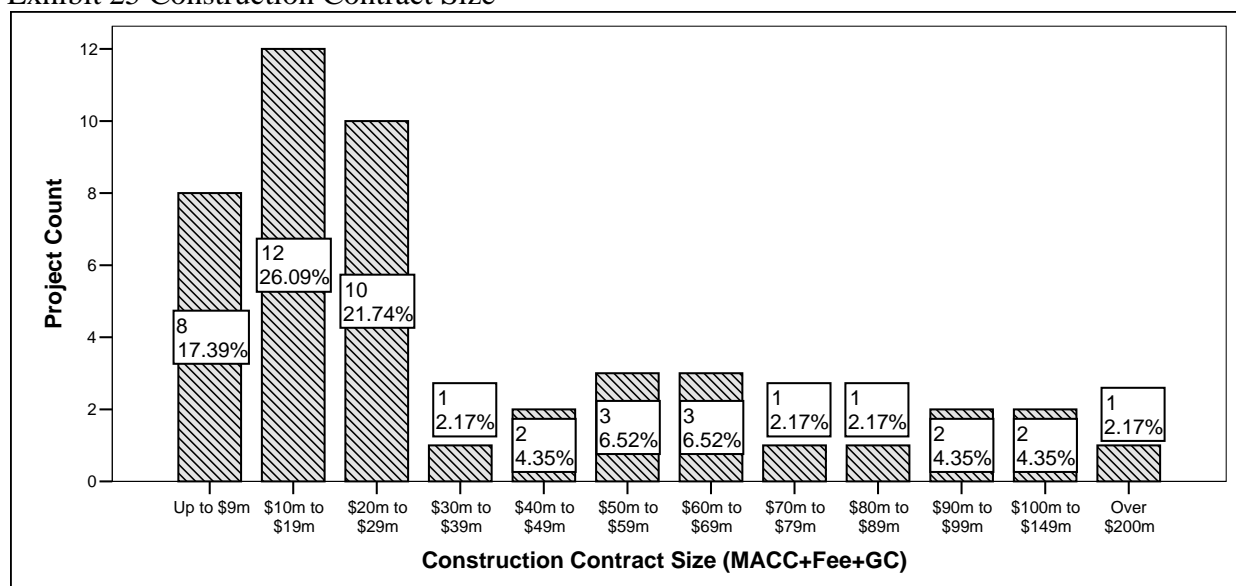


Exhibit 24 Percentage of those Responding



The combined total of the Maximum allowable construction costs (MACC), GC/CM fee, and general conditions (GC) was used to determine the GC/CM construction contract dollar value. Forty-four percent of the projects were under a construction contract value of \$20 million. See Exhibit 25.

Exhibit 25 Construction Contract Size



### 4.3 Findings

Three cost measures were used to evaluate cost performance: unit cost, project cost growth, and intensity (a hybrid of unit cost and schedule measures).

#### 4.3.1 Unit Cost

*Unit cost* was measured to indicate the relative cost of a facility for its given area.

$$\text{Unit Cost (\$/sf)} = \frac{\text{Final Project Cost (\$)} \times \text{Inflation Index}}{\text{Area (sf)}}$$

Where:

*Final Project Cost* was the final design cost plus the final cost of construction.

An inflation index was essential to make accurate comparisons of projects built in different years. Cost data—with the exception of cost growth (%)—were adjusted for time using Means 2004 historical cost indices. Since all the projects were built in Washington, a location index was not applied. Within state there is only a slight variance for cost: setting Seattle at 1, the location index would be 0.98 for Everett, 0.97 for Olympia, and 0.92 for Spokane.

A total of 40 completed projects reported final design and construction cost and gross area information. The mean *unit cost* was \$391/sf and the median was \$297. The most costly project was the Landsburg Fish Passage & Diversion Facility (\$3,882/sf) followed by WSU Energy Plant Redevelopment Project (\$1418/sf), and the least costly project was the UW's Pacific Tower (\$39/sf) followed by SeaTac Parking Garage (\$66/sf). It would be expected that a less complicated project with a large building area such as a parking garage would have a low unit cost while technical and more complex project would have a higher unit cost. Since there is no existing unit cost data for WA DBB projects, no comparisons or performance evaluation were made for unit cost. Exhibit 26 examines median *unit cost* by building type of reported projects.

Exhibit 26 Median Unit Cost (Design & Construction) by Building Type

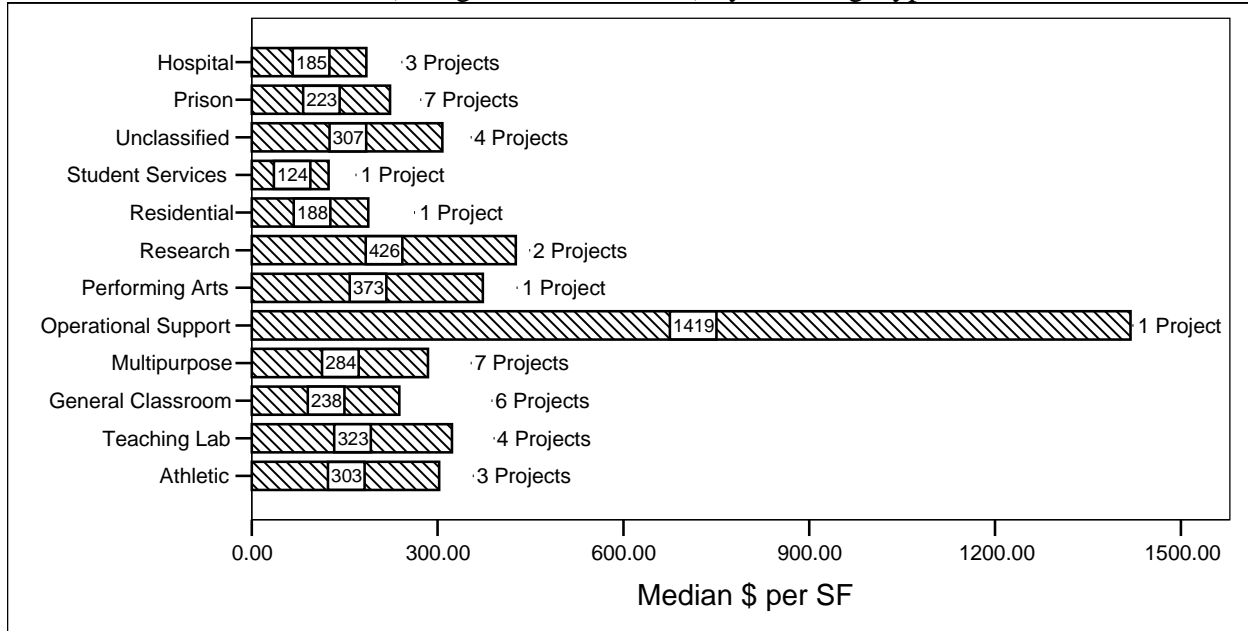


Exhibit 27 compares the median building *unit cost* by agency group and building type. Building unit costs will vary depending on the building floor area, exterior wall construction, and framing system. Average ranges in unit costs are shown per Means' 2005 Square Foot Costs manual for applicable building types. Means' historical square foot cost assumes the buildings are without basements and without unusual features. It is based on a rectangular economical building shape. The cost includes a contractor's fee (general conditions 10%, overhead 5%, profit 10%) and an architect's fee (6-9%). K-12 schools, prisons, and hospitals fall within Means' average building unit costs. GA, WSU and UW general classrooms and teaching labs are higher than Means' average building unit costs.

Exhibit 27 Median Building Unit Cost by Agency Group and Building Type

Building Type (Cost per square foot range per Means 2005 Square Foot Costs)	Design & Construction Average Cost per Square Foot								
	Cities	City PDA	Counties	GA	K-12 Schools	Other	Ports	UW	WSU
Athletic	.	.	.	.	.	.	.	302.62	.
Teaching Lab (\$122-\$227sf)	.	.	.	.	189.69	.	.	350.11	334.68
General Classroom (\$63-\$215sf)	.	.	.	274.01	141.83	.	.	358.23	.
Multi-purpose	303.56	120.83	.	310.40	.	.	.	.	265.07
Office	.	.	.	.	.	.	.	.	.
Operational Support	.	.	.	.	.	.	.	.	1418.53
Performing Arts	373.03	.	.	.	.	.	.	.	.
Research	.	.	.	.	.	.	.	404.85	447.53
Residential	.	.	.	222.47	.	222.55	.	.	.
Stadium	.	.	.	.	.	.	.	.	.
Student Services	.	.	.	.	.	.	.	123.95	.
Unclassified	2094.89	.	.	307.51	.	.	66.00	.	.
Prison (\$141-\$375sf)	.	.	202.08	223.03	.	.	.	.	.
Hospital (\$132-\$328sf)	.	.	.	.	.	.	.	184.97	.

*Construction contract unit cost* was measured to indicate the relative construction cost of a facility for its given area.

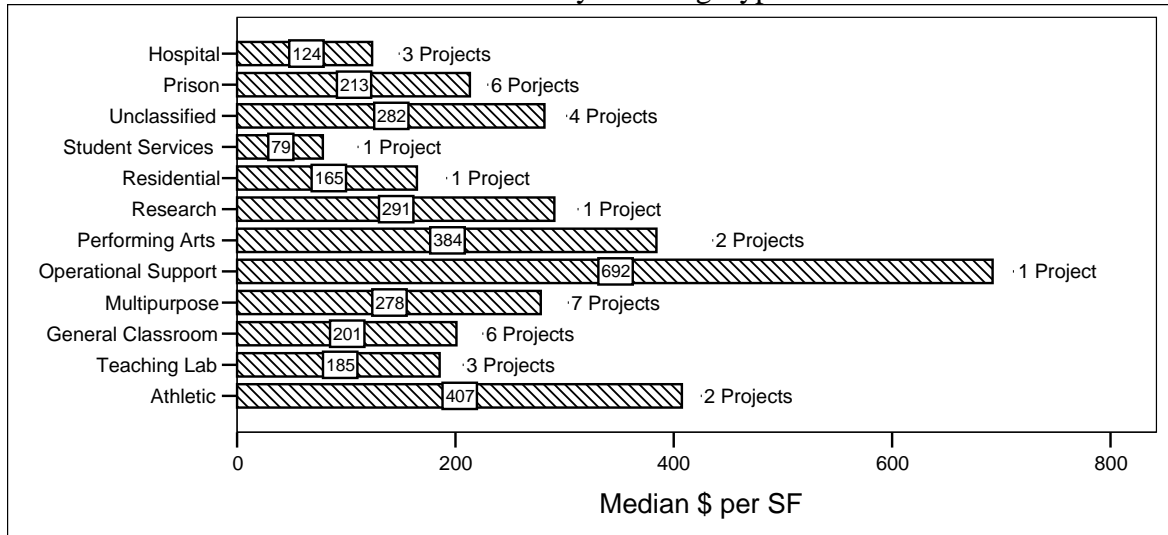
$$\text{Construction Contract Unit Cost (\$/sf)} = \frac{\text{Final Construction Contract Cost(\$)}}{\text{Area (sf)}} \times \text{Inflation Index}$$

Where:

*Final Construction Contract Cost* includes the final MACC, final fee, and final general conditions

A total of 37 completed projects reported construction contract cost and gross area information. The mean *construction contract unit cost* was \$305/sf and the median was \$234. The most costly project was the Landsburg Fish Passage & Diversion Facility (\$2,664/sf) followed by WSU Energy Plant Redevelopment Project (\$692/sf), and the least costly project was Pacific Tower (\$29/sf) followed by SeaTac Parking Garage (\$58/sf). It would be expected that a less complicated project with a large building area such as a parking garage would have a low unit cost while technical and more complex project would have a higher unit cost. Exhibit 28 examines median *construction contract unit cost* by building type of reported projects.

Exhibit 28 Median Construction Unit Cost by Building Type



#### 4.3.2 Cost Growth

*Cost growth* provides an indication of the growth of project costs over the life of the job. A value of 0% or less means the project met or finished under the budgeted cost. A value greater than 0% means costs increased from the budget.

$$\text{Cost Growth (\%)} = \frac{\text{Final Project Cost \$} - \text{Budgeted Project Cost \$}}{\text{Budgeted Project Cost \$}} \times 100$$

Where:

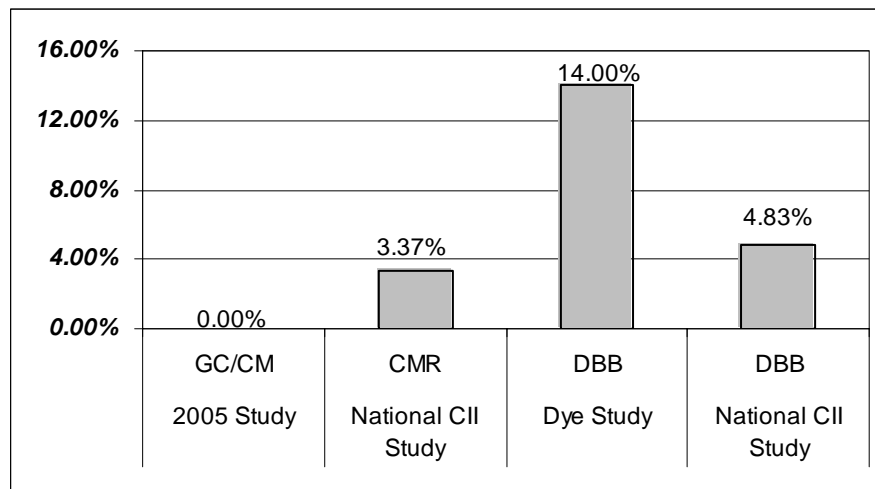
*Final Project Cost* was the final design cost plus the final cost of construction.

*Budgeted Project Cost* was the budgeted design cost plus the budgeted cost of construction.

A total of 41 completed projects reported budget and final cost information. The mean *cost growth* (1.69%) was above 0% while the median was 0%, indicating that on average the projects met cost expectations. The Department of General Administration's (GA) Monroe Close Custody Conversion & Repair project experienced the largest Cost Growth (38%), and GA/DOC's WCCW Replace G Units with 256 Beds project the lowest (-11.34%). Six projects (15%) reported a ratio of 0%, 17 projects (41%) were under 0%, and 18 projects (44%) were over 0%. Of the projects surveyed, 56% met or exceeded cost expectations despite an 84% response that the projects were completed within budget. This contrast might be due to capital project managers receiving approval to adjust their budgets during the life of a project.

Exhibit 29 compares WA GC/CM projects to the national CII Study. The WA GC/CM median *cost growth* was lower than CMR and DBB projects. WA GC/CM projects also experienced less *cost growth* than WA DBB projects as reported in the Dye Report.

Exhibit 29 Cost Growth (Design & Construction)



Completion on budget indicates whether one delivery system consistently provided agencies with a greater cost certainty. Five percent was chosen as an acceptable level of budget performance. Exhibit 30 investigates the percentage of projects whose actual cost exceeded the budgeted cost by more than 5%, those that fell within 5% of the budgeted cost, and those that under-ran the budget cost by more than 5%. Sixty-six percent of the projects had a 5% certainty of completing on budget, slightly higher than reported by the national CII Study for CMR and DBB projects. Less than 12% of the projects experienced significant cost savings, and 22% of the projects had over 5% Cost Growth. Compared to the national CII study, WA GC/CM projects had a higher percentage of under-running and a lower percentage of over-running by 5%.

Exhibit 30 Certainty of Completion on Budget

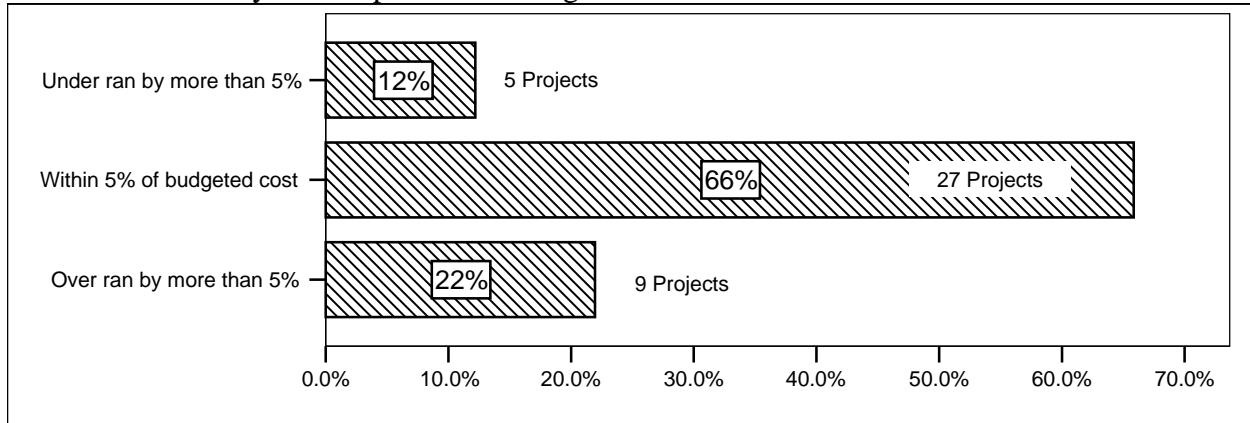
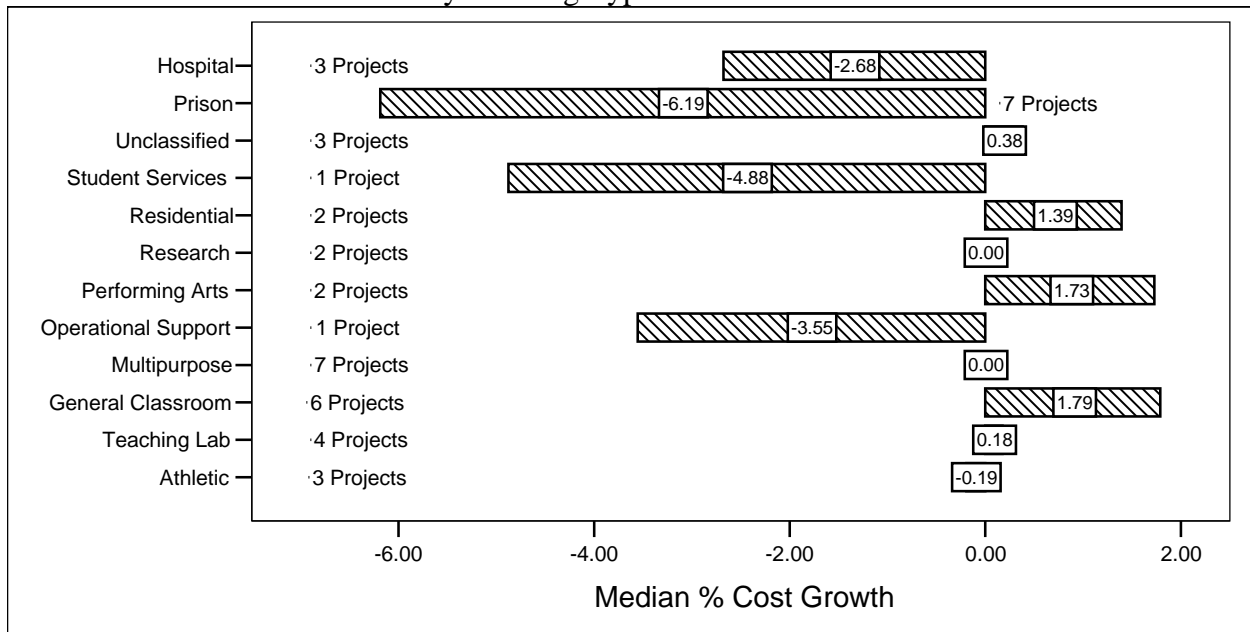


Exhibit 31 examines Cost Growth by building type. The median by building type did not exceed 5% Cost Growth.

Exhibit 31 Median Cost Growth by Building Types



### 4.3.3 Construction Contract Cost Growth

*Construction contract cost growth* is the percentage by which the construction costs grew over the life of the project. A value of 0% or less means construction costs met or finished below negotiated construction contract costs. A value greater than 0% means the costs increased from the negotiated construction contract costs.

$$\text{Construction Contract Cost Growth (\%)} = \frac{\text{Final Construction Contract Cost \$} - \text{Negotiated Construction Contract Cost \$}}{\text{Negotiated Construction Contract Cost \$}} \times 100$$

Where:

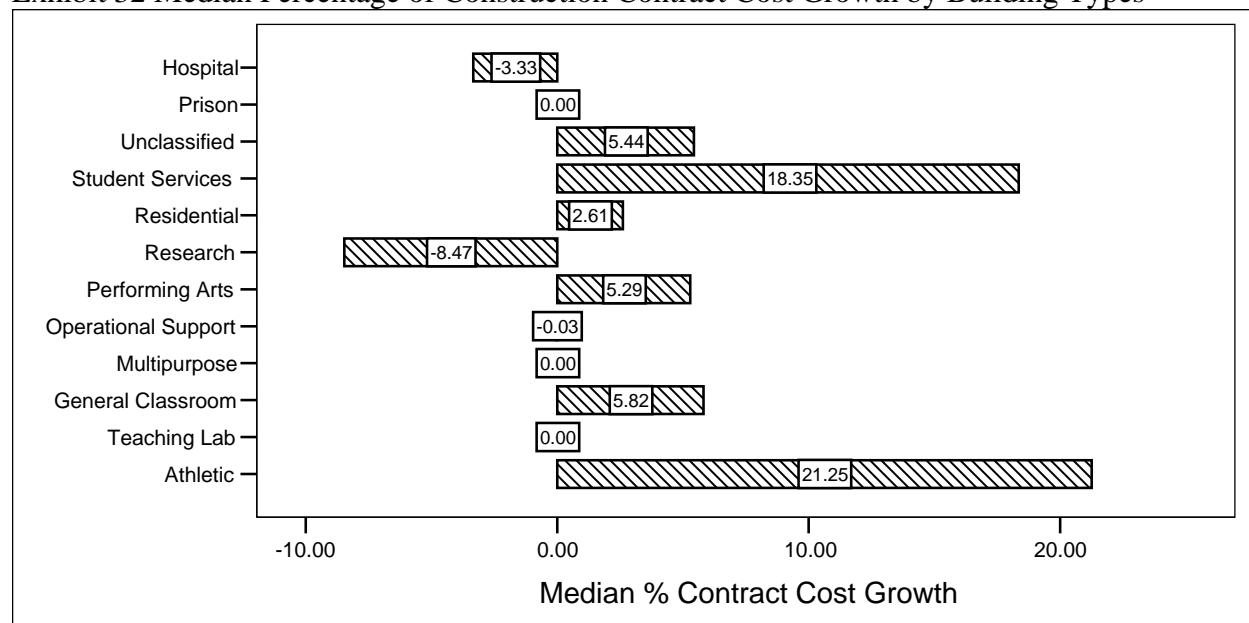
*Final Construction Contract Cost* includes final MACC, final GC/CM fee, and the final general conditions costs

*Negotiated Construction Contract Cost* includes the negotiated MACC, GC/CM fee, and general conditions costs

The *construction contract cost growth* mean (4.15%) and median (1.90%) were above 0%, indicating that on average project contract costs did not meet expectations. GA/DOC's Monroe Close Custody Conversion & Repair project experienced the highest overrun (43%) and WCCW Replace G Units with 256 Bed project the lowest (-19%). Thirty-nine projects reported final contract costs. Nine projects (23%) reported 0% cost growth, 10 projects (26%) were under 0%, and 20 projects (51%) were over 0%. Of the projects studied, 49% met or exceeded cost expectations. WA GC/CM projects also experienced less *construction cost growth* than WA DBB projects (12% median) as reported in the Dye Report.

Exhibit 32 examines *construction contract cost growth* by building type. Building types that exceeded 5% growth include unclassified, student services, performing arts, general classrooms, and athletic facilities.

Exhibit 32 Median Percentage of Construction Contract Cost Growth by Building Types





#### 4.3.4 Intensity of Delivery

*Intensity of delivery* indicates the unit cost of design and construction work put in place in a facility per unit time. A higher *Intensity* indicates a better outcome in terms of cost and schedule. Intensity accounts for the higher level of activities required for certain complex facilities than in simpler facilities with the same building area.

$$\text{Intensity of Delivery (\$/sf)/day} = \frac{\text{Unit Cost (\$/sf)}}{\text{Total Time (days)}}$$

A total of 39 completed projects reported cost, scheduling, and project gross area information. The mean *intensity of delivery* was 0.39 and the median was 0.21. The highest *intensity of delivery* (3.90) was WSU's Energy Plant (Steam Plant Redevelopment) and the lowest was UW's Pacific Tower (0.03).

Exhibit 33 compares the results to the National CII Study. The median *intensity of delivery* was higher than the National Study for CMR and DBB projects. The results of the National CII were converted from months to days for comparison. Also, WA GC/CM projects experienced a slightly better outcome than WA DBB projects reported by the Dye Study.

Exhibit 33 Intensity of Delivery

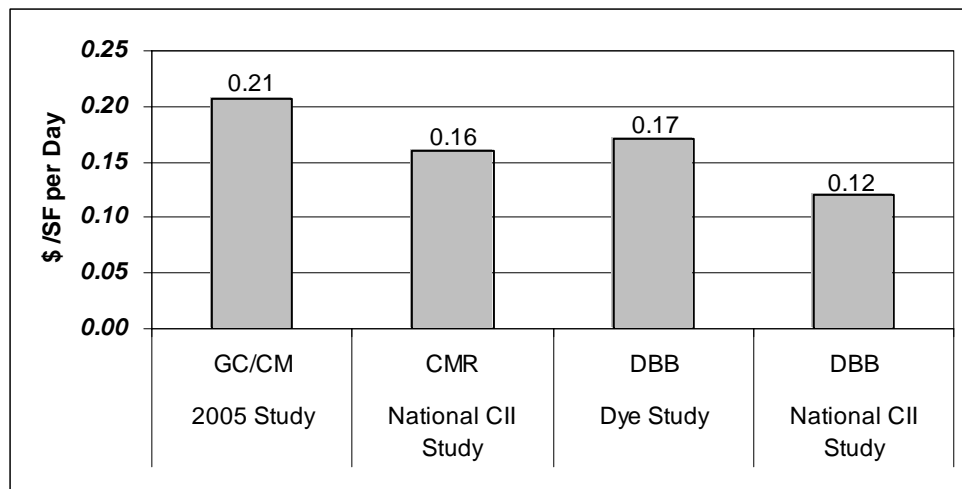
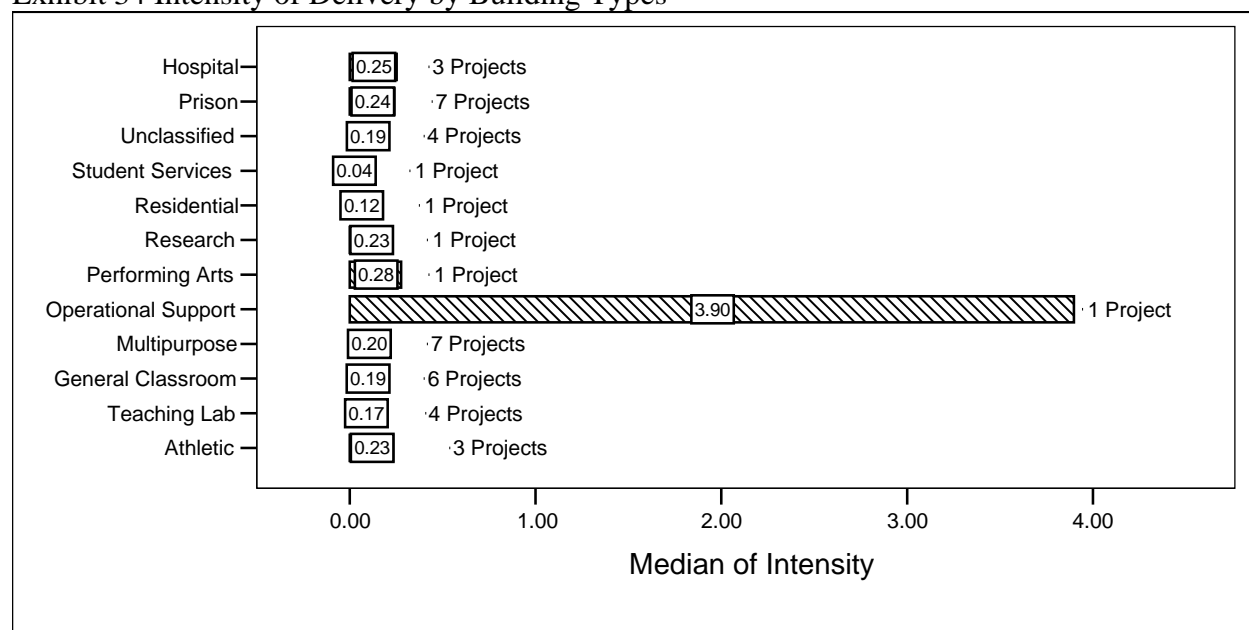


Exhibit 34 examines *intensity of delivery* by building type. Comparing Exhibit 33 and 34 it should be noted that the student service facility project reported a lower outcome than the National CII study DBB projects, and the residential facility project reported a lower outcome than WA DBB projects.

Exhibit 34 Intensity of Delivery by Building Types



#### 4.3.5 Construction Contract Price Summary

Based on a percentage of the MACC, the average GC/CM fee 4.03%, preconstruction services 0.89%, and general conditions 6.14% are within acceptable industry standards. A GC/CM contractor's fee includes profit and indirect overhead (home office expenses). Per the researchers' own experience the average fee for a general contractor can range from 2% to 15% and the fee amount is contingent on such factors as project risk, contract conditions, competition, and project complexity. The fee percentage is typically larger for smaller projects since the ratio of building construction cost and the dollar amount need to cover expenses and an expected return on investment is higher. Per Means' Estimating Handbook and Means' 2005 Square Foot Costs manual the average fee for construction management services ranges between 2.5% to 4% for projects above \$5 million and the average markup for general conditions is between 10% to 15% on projects over \$10 million. See Exhibit 35 for a summary of contract price statistics.

Exhibit 35 Construction Contract Price Summary Descriptive Statistics

	Fee %	PreCon Service %	GC %
Count	75	69	77
Mean	4.03	0.89	6.14
Std. Deviation	3.43	0.57	8.21
Median	3.50	0.82	4.83
Minimum	1.85	0.00	0.83
Maximum	25.50	2.84	72.20

#### 4.3.6 Contingency

Contingency is set aside to mediate the risks associated with construction such as design errors and omission and unforeseen conditions. Seventy-five percent (81 projects) of the surveys returned a response to the question, “Were there any contingency funds set aside on this project?” Of those responding 99% of the surveys reported that a project contingency was utilized, only one survey reported that a contingency fund was not used, UW’s Tacoma Branch Campus Phase 2B Project.

The survey broke the contingency into two categories:

- Project/Owner Contingency
- GC/CM Contingency

Sixty-nine percent (75 projects) of the surveys provide data on the contingency amount budgeted, 95% (71 projects) responded utilizing a project/owner contingency and 81% (61 projects) responded utilizing a GC/CM contingency.

For projects providing data on budgeted contingency amounts the mean project/owner contingency set aside was 4.77% of the total budgeted project cost and 7.16% of the negotiated construction contract cost. The mean GC/CM contingency set aside is 2.84% of the total budgeted project cost and 4.23% of the negotiated construction contract cost.

The survey asked who controlled the use of the contingency dollars set aside. Sixty-five percent (70 projects) of the surveys responded. One-hundred percent of the respondents reported that the owner or the owner’s agent controlled the project/owner contingency and 53% reported that the owner or the owner’s agent also controlled the GC/CM contingency.

If the contingency was not used the survey asked what percentage amount would be returned to the owner. For the project/owner contingency the median was 100% (91% mean) of the remaining contingency would be returned to the owner. For the GC/CM contingency the median was 50% (54% mean) of the remaining contingency would be returned to the owner.

*Contingency growth* provides an indication of the growth of contingency over the life of the project. A value greater than 0% means the project exceeded its contingency, a value of 0% means the total contingency was used, and a value of less than 0% means the total contingency was not consumed.

$$\text{Contingency Growth (\%)} = \frac{\text{Final Contingency \$} - \text{Budgeted Contingency \$}}{\text{Budgeted Contingency \$}} \times 100$$

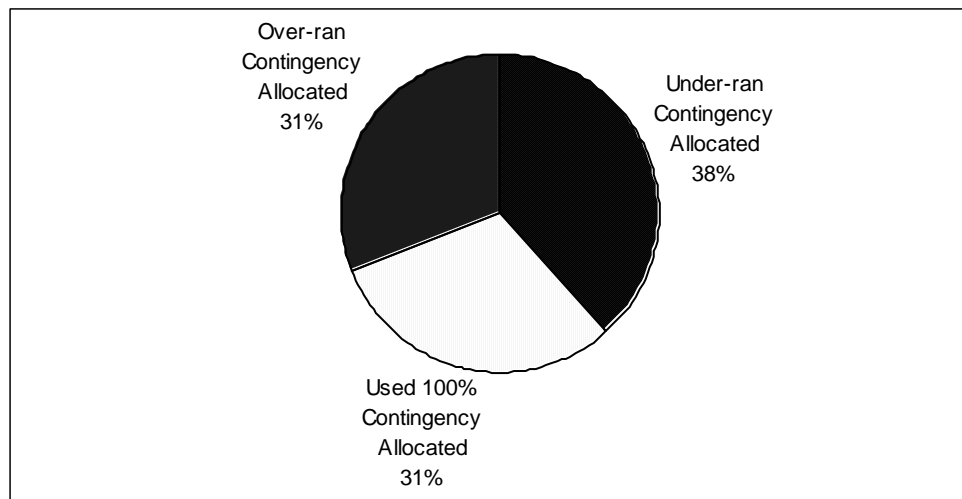
#### 4.3.7 Owner Contingency Growth

A total of 39 surveys reported budgeted and final project/owner contingency information. The *Owner contingency growth* mean (3.35%) was above 0%, but the median equaled 0, indicating that on average the projects exceed or used the entire allotted project/owner contingency.

The highest percentage of *owner contingency growth* was 279%; GA/DOC Monroe Close Custody Conversion & Repair project, and the lowest ratio was -100%, indicating none of the allotted contingency was used on the New Holly Phase 2 and the Surgery Pavilion projects.

Two projects reported -100% (5%), 12 projects (31%) reported 0%, 13 projects (33%) were under 0%, and 12 projects (31%) were over 0%. Of the projects studied 38% under-ran the contingency allotted, 31% used the entire contingency allotted, and 31% exceeded the contingency allotted. See Exhibit 36.

Exhibit 36 Percentage of Project/Owner Contingency Growth



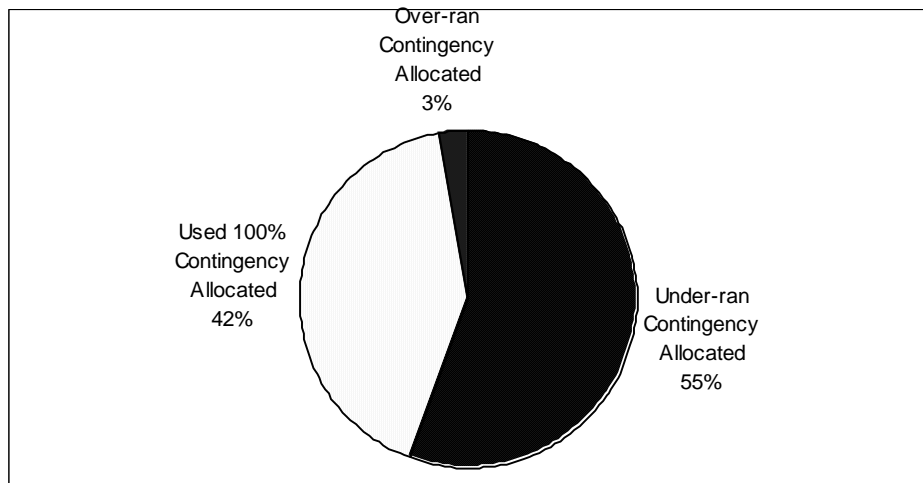
#### 4.3.8 GC/CM Contingency Growth

A total of 36 completed projects reported budgeted and final GC/CM contingency information. The *GC/CM contingency growth* mean (-24%) and the median (-1%) were below 0%, indicating that on average the projects did not use the entire allotted contingency.

The highest percentage of *GC/CM contingency growth* was 27%, UW Cascade Tower Renovation, and 4 projects (11%) reported -100%, indicating none of the allotted contingency was used.

Fifteen projects (42%) reported 0%, 16 projects (44%) was under 0%, 4 projects (11%) reported -100% and 1 project (3%) was over 0%. Of the projects studied 55% under-ran the contingency allotted, 42% used the entire contingency allotted, and 3% exceeded the contingency allotted. See Exhibit 37.

Exhibit 37 Percentage of GC/CM Contingency Growth

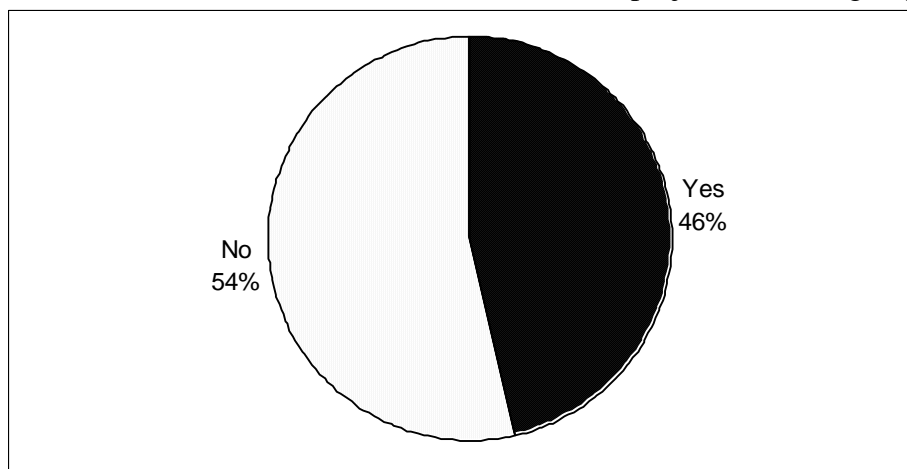


#### 4.3.9 Cost Incentives

Contracting methods can include performance measures through incentive and/or disincentive. Each project has various goals of different levels for cost, quality, and schedule. Each goal has some minimum level of requirements. Project success depends on the degree to which all goals have been met. An incentive provides away for an agency to specifically determine the goals for the project and communicate those goals to the contractor. Typical performance measures that a cost incentive can be based on included project quality, performance, schedule and cost. Other performance measures could include permitting, public involvement, impact and disruption, environmental compliance, safety, and warranties to name a few.

Seventy-one (66%) surveys responded to question; “Were cost incentives utilized on this project (excluding buyout)?” Fifty-four percent of the projects did not utilize cost incentives. See Exhibit 38. The average cost incentive awarded was under 1% of the negotiated construction contract value. Incentives paid out ranged from 0 to 3.44% of the negotiated construction contract cost, with a mean of 0.84% and a median of 0.45%.

Exhibit 38 “Were cost incentives utilized on this project (excluding buyout)?”



## 5. Contract Changes

### 5.1 Summary

In theory, GC/CM is designed to minimize the need for change orders and litigation. However, the process does not eliminate the need for contract changes. The same factors—e.g., design errors or omissions, differing site conditions, project re-scoping, weather, delivery delays, revision to governmental codes, site access delays, labor issues, or environmental issues—generate changes on GC/CM projects as they do on DBB projects. Early involvement by the GC/CM contractor, however, should decrease the overall need for changes during construction.

Less than half of the projects reported their experience with changes. Of those, two athletic facilities and one operational support project experienced the highest average dollar rate of changes; four residential projects experienced the lowest average. Of the agencies, UW experienced the highest reported average rate of changes.

Predictably, total-renovation projects experienced a higher average rate of changes than new construction. Also, the average rate of changes was lower for the five projects whose MACC was set at the end of design development.

The median rate of change for the GC/CM projects studied and was within The National Research Council's Building Research Board's expected contract modifications range of 5% to 10 % increase.

The overall rate of change for the GC/CM projects studied was lower when compared to public and private DBB projects in the Septelka (1997) and Engan (1996) studies. The rate of change was also lower than both studies for all change types, except for the unforeseen conditions and contractor changes.

### 5.2 Findings

All private and public construction projects are subject to modifications or change. Anything that alters the original project scope is a change. The issuance of a change order amends the construction contract, revising the original contracted scope of work. Changes not mutually agreed upon by both parties can evolve into claims for damages. Many factors can attribute to change, such as design errors or emissions, differing site conditions, project rescoping, weather, delivery delays, revision to governmental codes, site access delays, labor issues, or environmental issues. Neither the owner nor the contractor can control all types of changes. Changes can adversely impact stakeholders, affecting project cost, schedule, and/or productivity.

A mathematical relationship called the *change-order ratio* (COR) is the standard industry factor most often used to analyze or benchmark projects. The COR is the total dollar amount of contract changes divided by the original GC/CM construction contract dollar amount.

$$\text{Change Order Ratio (COR)} = \frac{\text{Contract Change Amount \$}}{\text{Original GC/CM Construction Contract Amount \$}}$$

Forty-six surveys provided information on project changes, representing 43% of the total projects studied. The CORs range from 0.14% to 37.8%, with a mean of 11% and a median of 8%. Sixty-nine percent of the projects reported CORs over 5%, and 35% over 10%.

To analyze the COR on GC/CM projects this investigation compared previous studies that evaluated changes on construction management at risk (i.e., GC/CM) and design-bid-build (DBB) projects. The hypothesis is that GC/CM projects should have a lower COR than DBB since the contractor is involved earlier in the project, assisting in planning and design.

The following studies reported change order statistics to benchmark against:

- “An Investigation of Change Orders in the Private Sector” by Darlene Septelka analyzed 659 DBB projects for a NW firm between 1993 and 1997. The projects studied ranged from under \$10K to \$14M and included renovation, maintenance, and new construction. The mean COR for DBB projects was 109% and the median was 4%.

Septelka’s study also investigated 115 negotiated-cost-plus-fixed-fee projects. In many cases the contractor was hired during design similar to GC/CM, but the contract did not have a maximum allowable construction cost (MACC). The contractor was reimbursed for all costs, even if the project was over the budgeted cost. The contractor’s fee was fixed on the budgeted cost, thus a contractor did not receive any additional fee if the project finished over budget. The mean COR for negotiated cost plus a fee projects was 247% and the median 7%.

Unencumbered by public procurement restraints, private owners are driven more by schedule. Projects tend to be started prior to complete analysis of customer’s requirements or an in-depth investigation of risks due to unforeseen conditions.

- “An Investigation of Change Orders on University of Washington Construction Projects” by Christine Ann Engan analyzed 231 UW project between 1992 and 1995. The projects studied were all under \$10 million and included renovation, maintenance, and miscellaneous work, but did not include new construction. Since all the projects were less than \$10 million, all the work was contracted using DBB. Engan reported that the mean COR for DBB projects under \$10 million was 15% and the median was 9%.
- The National Research Council’s Building Research Board’s committee on construction change orders (1986) reported—after looking at 59,155 private projects, 2200 Veteran Administration projects, and \$2.5 billion in Federal projects—that “contract modifications which increase contract value between 5 and 10 percent would reasonably be expected on most construction projects.”

### **5.3.1 Change Category**

Many factors can attribute to change, such as design errors or omissions, differing site conditions, project re-scoping, weather, delivery delays, revision to governmental codes, site access delays, labor issues, or environmental issues. Exhibit 39 reports CORs by change type for projects under \$20 million.

Exhibit 39 Study Comparison of COR Mean for Projects under \$20M

	CO - Owner Scope Ratio	CO - Design E&O Ratio	CO - Unforeseen Conditions Ratio	CO - Contractor Ratio	CO - Code/Reg - Ratio	CO - Other - Ratio	CO - Total Dollar Ratio
GC/CM WA Projects	5.05	1.73	1.42	1.08	0.24	0.06	9.64
Septelka's Study							
DBB	25-60	2.39	0.24	0.14	1.74	1.15	109.00
Cost plus Fixed Fee	18-124	3.05	13.00	2.61	0.62	7.79	247.00
Engan's Study							
DBB (only renovation)	5.20	2.40	5.40		0.40		15.50

The Exhibit 39 compares GC/CM CORs with Septelka's and Engan's studies. The overall COR ratio for the GC/CM projects studied was lower than both the private and the UW studies. The CORs for GC/CM projects were lower than both studies for all change types, except for the following:

Unforeseen Conditions: DBB 0.24% v. GC/CM 1.42%

Contractor: DBB 0.14% v. GC/CM 1.08%

The mean for all projects included in this study is shown in the Exhibit 40. The overall mean COR is higher when including all projects. The overall mean COR is slightly higher for owner, unforeseen conditions, other, and code/regulations. The overall mean is lower for design and contractor changes.

Exhibit 40 COR Mean for all GC/CM Projects

	CO - Owner Scope Ratio	CO - Design E&O Ratio	CO - Unforeseen Conditions Ratio	CO - Contractor Ratio	CO - Code/Reg - Ratio	CO - Other - Ratio	CO - Total Dollar Ratio
Count Valid	35	35	35	35	35	35	45
Count Missing	73	73	73	73	73	73	63
Mean	5.47	1.52	2.11	.79	.25	.47	11.11
Median	3.61	.66	.49	.00	.00	.00	8.02
Std. Deviation	5.66	2.42	4.76	1.55	.59	2.28	10.01
Minimum	.00	.00	.00	-1.75	.00	-4.69	.14
Maximum	23.84	11.74	26.80	5.38	3.11	10.95	37.84

This investigation also studied several other factors—such as building type, agency, size, and design stage when the GC/CM became involved on the project—to evaluate COR trends on GC/CM projects. It should be noted that, when the study sample is further broken into categories for different factors, the sample size falls under the required size to test for significance or correlations. Thus the following sections report observations and are not statistically tested.



### 5.3.2 Building Type

The projects in this study can be broken into several building types. The mean COR for five types is greater than the overall mean COR. The mean COR is highest for athletic facilities (34%) and operational support buildings - (28%). The mean COR for seven types is smaller than the overall mean COR. The mean COR is lowest for residential projects (3.9%). See Exhibit 41.

Exhibit 41 COR by Building Type

CO - Total Dollar Ratio						
Building Type	Mean	N	Std. Deviation	Median	Minimum	Maximum
Athletic	34.4224	2	4.69807	34.4224	31.10	37.74
Teaching Lab	8.3092	2	3.61772	8.3092	5.75	10.87
General Classroom	11.7748	9	8.48372	11.2372	.14	24.69
Multipurpose	6.5736	6	3.09782	5.9884	3.07	10.64
Operational Support	28.5082	1	.	28.5082	28.51	28.51
Performing Arts	7.4986	2	3.84876	7.4986	4.78	10.22
Research	9.0181	1	.	9.0181	9.02	9.02
Residential	3.8736	4	2.97068	3.2172	1.04	8.02
Student Services	12.1926	1	.	12.1926	12.19	12.19
Unclassified	14.0141	5	7.89682	14.2237	5.64	24.34
Prison	10.7799	9	14.09732	3.7903	1.42	37.84
Hospital	7.2347	3	1.66093	6.7657	5.86	9.08
Total	11.1085	45	10.00809	8.0198	.14	37.84

### 5.3.3 Agency

RCW 39.10 allows several state, county, and local agencies to use GC/CM as a project delivery method. The mean COR can be evaluated by agency. The mean COR for three agencies is greater than the overall mean COR; seven are lower. The University of Washington (18.3%) had the highest mean COR and agencies classified as “Other” (2.5%) had the lowest mean COR. See Exhibit 42.

Exhibit 42 COR by Agency

Case Summaries						
CO - Total Dollar Ratio						
RCW Code	Mean	N	Std. Deviation	Median	Minimum	Maximum
Cities	11.1058	7	7.60406	8.0198	3.92	24.34
City PDA	6.5959	1	.	6.5959	6.60	6.60
Counties	8.2501	1	.	8.2501	8.25	8.25
GA	10.4046	13	11.94055	5.2330	1.42	37.84
K-12 Schools	7.6249	7	6.79440	5.7511	.14	20.91
Other	2.4915	3	1.33294	2.7732	1.04	3.66
PFD	4.7771	1	.	4.7771	4.78	4.78
Ports	14.2237	1	.	14.2237	14.22	14.22
UW	18.3168	10	11.31518	14.0926	5.86	37.74
WSU	9.0181	1	.	9.0181	9.02	9.02
Total	11.1085	45	10.00809	8.0198	.14	37.84

### 5.3.4 Construction Contract Value

In reviewing the mean COR by contract value, the results did not indicate any correlation. See Exhibit 43.

Exhibit 43 COR by Construction Contract Value

CO - Total Dollar Ratio						
Construction Contract	Mean	N	Std. Deviation	Median	Minimum	Maximum
Up to \$9m	12.9908	6	12.31122	8.6180	5.23	37.84
\$10m to \$19m	7.4916	13	5.88650	5.7511	1.42	20.91
\$20m to \$29m	20.7970	8	12.77131	24.5120	1.04	37.74
\$30m to \$39m	1.9016	1	.	1.9016	1.90	1.90
\$40m to \$49m	5.8905	3	4.65160	3.6612	2.77	11.24
\$50m to \$59m	10.0406	4	5.92132	9.9340	4.30	15.99
\$60m to \$69m	4.8496	4	3.34369	5.6198	.14	8.02
\$70m to \$79m	3.9179	1	.	3.9179	3.92	3.92
\$80m to \$89m	3.4671	1	.	3.4671	3.47	3.47
\$90m to \$99m	14.5448	2	6.11596	14.5448	10.22	18.87
\$100m to \$149m	9.8426	1	.	9.8426	9.84	9.84
Total	10.6173	44	9.55942	7.5085	.14	37.84

### 5.3.5 Project Size – Gross Area

In reviewing the mean COR by project size, the results did not indicate any correlation. See Exhibit 44.

Exhibit 44 COR by Gross Area

CO - Total Dollar Ratio						
Total Gross Area (sq ft)	Mean	N	Std. Deviation	Median	Minimum	Maximum
1 to 40,000	15.0392	4	15.32844	8.8175	4.78	37.74
40,001 to 80,000	12.1864	6	12.75085	8.5872	3.79	37.84
80,001 to 120,000	8.0578	8	7.50031	4.5007	1.42	20.91
120,001 to 160,000	12.1850	4	11.46517	8.9166	2.40	28.51
160,001 to 200,000	6.1150	6	5.20219	5.5126	1.04	15.99
200,001 to 240,000	3.6612	1	.	3.6612	3.66	3.66
240,001 to 280,000	31.1004	1	.	31.1004	31.10	31.10
280,001 to 320,000	6.1543	5	4.93988	4.3017	.14	12.19
Above 320,000	12.4254	4	5.27452	12.0332	6.77	18.87
Total	10.2154	39	9.56073	6.7657	.14	37.84

### 5.3.6 Percentage of New Construction

In reviewing the mean COR by new v. renovation projects, the results did not indicate any correlation as the percentage of new construction increased. However, comparing 100% new to 100% renovation, the latter had an 8.6% higher mean COR. See Exhibit 45.

Exhibit 45 COR by Percentage of New Construction

CO - Total Dollar Ratio						
Percentage - New	Mean	N	Std. Deviation	Median	Minimum	Maximum
0%	17.5293	5	11.40658	12.1926	6.77	31.10
21-40%	.1390	1	.	.1390	.14	.14
41-60%	17.2005	4	15.67629	13.3299	4.30	37.84
61-80%	7.9323	2	3.23553	7.9323	5.64	10.22
81-99%	5.8365	5	5.09229	3.6612	1.90	14.22
100%	8.9038	23	7.96697	6.5959	1.04	37.74
Total	10.1605	40	9.44374	6.8815	.14	37.84

### 5.3.7 Construction Schedule

In reviewing the mean COR by construction schedule (calendar days), the results did not indicate any correlation. See Exhibit 46.

Exhibit 46 COR by Construction Schedule

CO - Total Dollar Ratio						
Construction Days	Mean	N	Std. Deviation	Median	Minimum	Maximum
Under 300	1.4176	1	.	1.4176	1.42	1.42
300 - 399	17.7699	4	15.26460	14.9942	3.25	37.84
400 - 499	12.5921	4	11.06888	9.3971	3.07	28.51
500 - 599	5.5197	3	4.72644	3.7903	1.90	10.87
600 - 699	15.0596	9	12.15248	9.0181	3.47	37.74
700 - 799	6.2928	9	4.31610	5.3808	.14	14.22
800 - 899	6.9828	5	3.73302	6.7657	2.77	11.24
Over 1000	6.3009	3	4.64610	8.0198	1.04	9.84
Total	10.1424	38	9.56173	6.8815	.14	37.84

### 5.3.8 GC/CM's Involvement during Design

In reviewing the mean COR by the stage when the GC/CM contractor was selected, the results did not indicate a strong correlation. See Exhibit 47.

Exhibit 47 COR by Design Stage of GC/CM Involvement

CO - Total Dollar Ratio						
Design Stage	Mean	N	Std. Deviation	Median	Minimum	Maximum
Project Feasibility	10.8673	1	.	10.8673	10.87	10.87
Programming	13.7200	3	20.89060	1.9016	1.42	37.84
Schematic Design	9.3848	23	9.16941	5.6444	.14	37.74
Design Development	10.4144	12	8.20991	7.3761	1.04	28.51
Construction Documents	8.5190	2	.70593	8.5190	8.02	9.02
Total	9.9973	41	9.38336	6.7657	.14	37.84

### 5.3.9 Design Stage MACC was Negotiated

The design stage in which the MACC was negotiated was reviewed to see if there was a correlation between the mean COR and the percentage of design development. The hypothesis would predict that the mean COR would decrease the later the MACC was set. The results did not indicate a strong correlation, but the mean COR was lower for the five projects in which the MACC was set at the end of design development. See Exhibit 48.

Exhibit 48 COR by Design Stage of MACC Negotiation

CO - Total Dollar Ratio						
Design Stage %	Mean	N	Std. Deviation	Median	Minimum	Maximum
50%	9.2562	8	12.06017	5.0051	1.42	37.84
60%	6.7353	2	4.92832	6.7353	3.25	10.22
70%	11.8867	4	9.28394	11.5855	3.47	20.91
80%	12.6838	16	10.98252	9.9735	.14	37.74
90%	7.5803	5	4.22082	6.9973	2.77	14.22
100%	4.9923	5	2.71813	5.6444	1.04	8.02
Total	10.0218	40	9.50157	6.6808	.14	37.84

## 6.0 GC/CM Selection Process

### 6.1 Summary

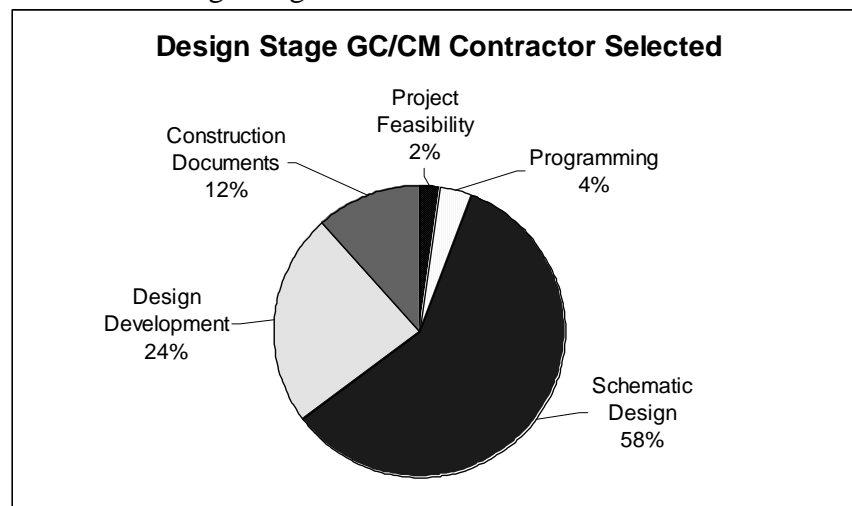
Seven firms were selected as GC/CM contractor on 72% of the projects. All seven are midsized to large Northwest firms or local offices of large national or international firms. Three of those firms—Hoffman, Mortenson, and Skanska—did nearly half of the projects. Sixteen firms did one fourth of the projects; seven of those are small regional firms.

Five firms competed on the average project, with the number of new firms entering GC/CM competitions declining over time. Successful firms were selected one out of every three tries. Some 50 firms competed unsuccessfully for GC/CM roles. Most of them tried 1-3 times, but one midsized regional firm made 19 unsuccessful tries. Based on the study data, there is no information to explain why this firm was unsuccessful at winning a GC/CM project.

### 6.2 Response to Survey

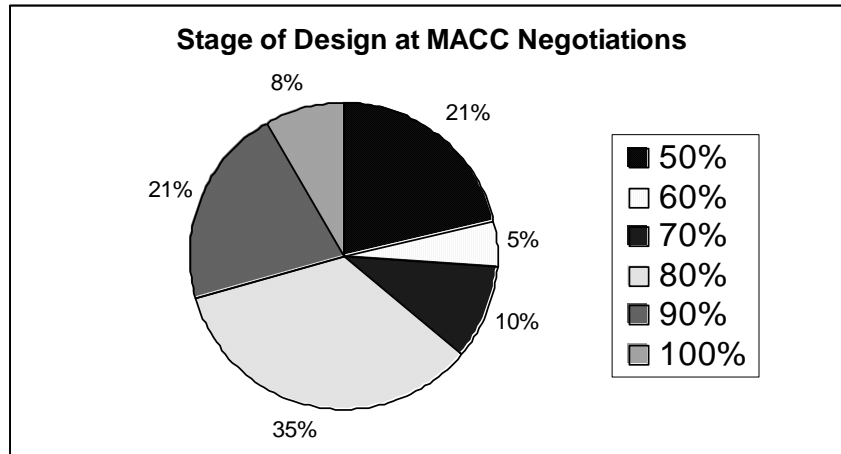
Ninety-four percent of the projects studied have selected the GC/CM contractor. Fifty-eight percent of the projects were in schematic design when the GC/CM contractor was selected. Exhibit 49 depicts the stages of design at GC/CM selection and the percentages of projects at those stages.

Exhibit 49 Design Stage GC/CM Contractor Selected



The percentage of design completion at MACC negotiation ranged from 50% to 100%, with 64% of the projects negotiating the MACC after 70% completion. See Exhibit 50.

Exhibit 50 Stage of Design at MACC Negotiations



Eighty-six surveys provided information on the number of GC/CM firms that competed in the selection process. A mean of 5.49 contractors competed per project; the median was 5. Overall, from 2 to 11 contractors competed per project.

## 6.3 Findings

The response to this study does not reflect the total number of firms that actually competed in the selection process. Some agencies only reported the number and firms that were short-listed after the prequalification phase. This skews the results of the study and limits the confidence level when analyzing the competition. The reader should keep this in mind when reviewing the following results regarding successful and unsuccessful firms.

### 6.3.1 Successful Firms

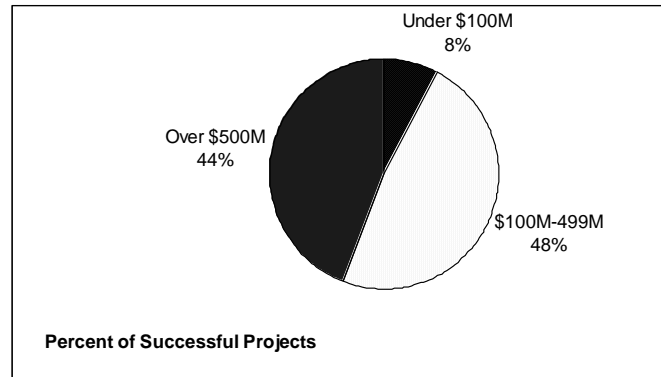
One hundred two projects identified the successful GC/CM contractor. The other 6 projects do not have a GC/CM selected. Contractors were grouped into three annual revenue ranges:

- Under \$100 million: Small regional firms.
- \$100 million to \$500 million: Midsized to large northwest firms with a majority of their revenue from northwest construction projects.
- Over \$500 million: Large national and international firms.

Firm sizes were approximated from publicly-reported sources.

Only 8% of the projects were awarded to small firms under \$100 million. All of the successful firms had annual revenues of \$20 million or above. Exhibit 51 illustrates the contract award distribution among the three size ranges.

Exhibit 51 Contract Award by Firm Size Categories



A total of 23 firms were successful at winning GC/CM projects. Seven firms were successful over 5 times; 4 of these firms were midsize and three were large firms. A summary of the successful firms is depicted in Exhibit 52 and 53.

Exhibit 52 Successful Firms

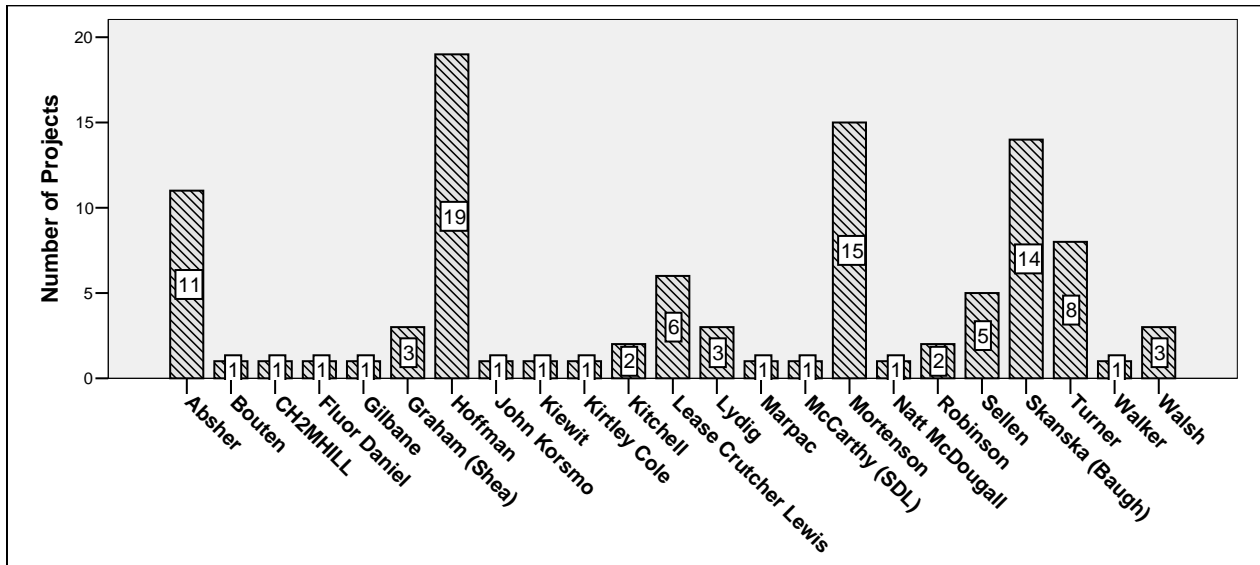
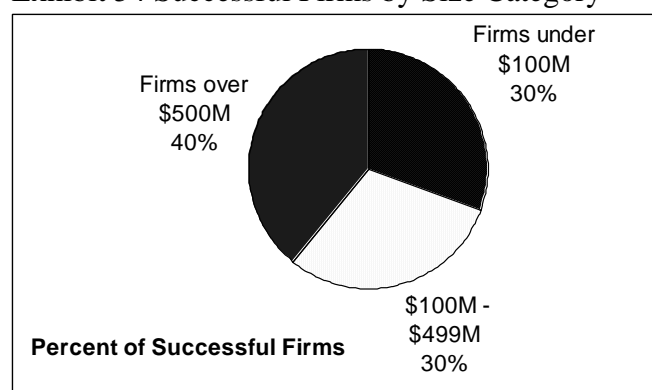


Exhibit 53 Successful Firms Descriptive Statistics (Sorted by number of successful projects)

Firm	Size	Unsuccessful Bids	% of 102 projects	Successful Bids	% of 102 projects	Total Attempts	% Successful
Hoffman Construction Company	\$100M to \$500M	25	24.51%	19	18.63%	44	43.18%
M.A. Mortenson Company	Over \$500M	28	27.45%	15	14.71%	43	34.88%
Skanska (Baugh)	Over \$500M	29	28.43%	14	13.73%	43	32.56%
Absher	\$100M to \$500M	30	29.41%	11	10.78%	41	26.83%
Turner Construction Company	Over \$500M	37	36.27%	8	7.84%	45	17.78%
Lease Crutcher Lewis	\$100M to \$500M	20	19.61%	6	5.88%	26	23.08%
Sellen Construction	\$100M to \$500M	7	6.86%	5	4.90%	12	41.67%
Lydig Construction	\$100M to \$500M	18	17.65%	3	2.94%	21	14.29%
Walsh Construction	\$100M to \$500M	3	2.94%	3	2.94%	6	50.00%
Graham(Shea)	Over \$500M	6	5.88%	3	2.94%	9	33.33%
Kitchell Contractors	\$100M to \$500M	2	1.96%	2	1.96%	4	50.00%
Robinson Construction	Under \$100M	2	1.96%	2	1.96%	4	50.00%
Fluor Daniel	Over \$500M	3	2.94%	1	0.98%	4	25.00%
CH2MHILL Constructors, Inc	Over \$500M	1	0.98%	1	0.98%	2	50.00%
Gilbane Building Company	Over \$500M	8	7.84%	1	0.98%	9	11.11%
Kiewitt Construction Company	Over \$500M	5	4.90%	1	0.98%	6	16.67%
McCarthy(SDL)	Over \$500M	10	9.80%	1	0.98%	11	9.09%
Bouten Construction	Under \$100M	2	1.96%	1	0.98%	3	33.33%
John Korsmo Construction	Under \$100M	2	1.96%	1	0.98%	3	33.33%
Kirtley Cole	Under \$100M	2	1.96%	1	0.98%	3	33.33%
Marpac Construction LLC	Under \$100M	0	0.00%	1	0.98%	1	100.00%
Natt McDougall Company	Under \$100M	1	0.98%	1	0.98%	2	50.00%
Walker	Under \$100M	2	1.96%	1	0.98%	3	33.33%
Mean		10.57	10.36%	4.43	4.35%	15.00	35.34%
Std. Dev.		11.67	11.44%	5.32	5.21%	16.34	19.18%
Median		5.00	4.90%	2	1.96%	6	33.33%
Min		0.00	0.00%	1	0.98%	1	9.09%
Max		37	36.27%	19	18.63%	45	100.00%

Of the 23 successful firms, 30% were small contractors. See Exhibit 54 for successful contractor distribution among the three firm size ranges.

Exhibit 54 Successful Firms by Size Category

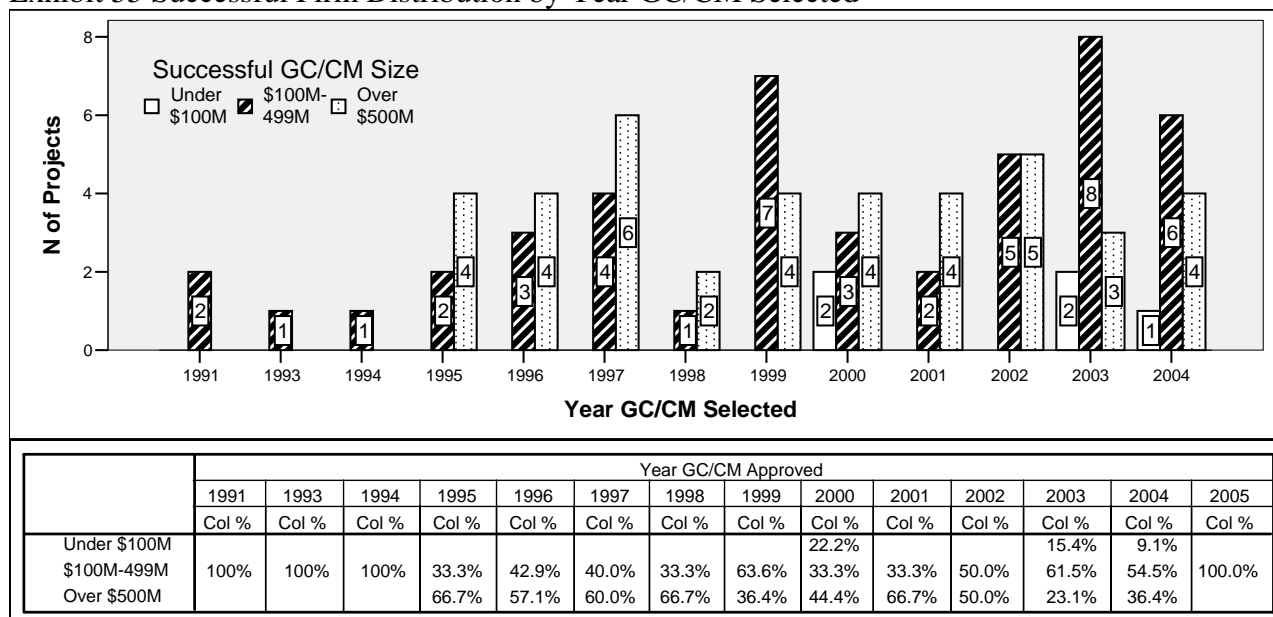




## Year GC/CM Selected

Exhibit 55 shows the project distribution over the study's time frame by firm size. Note that the total number of projects differs by 8; this is due to incomplete surveys and missing project data.

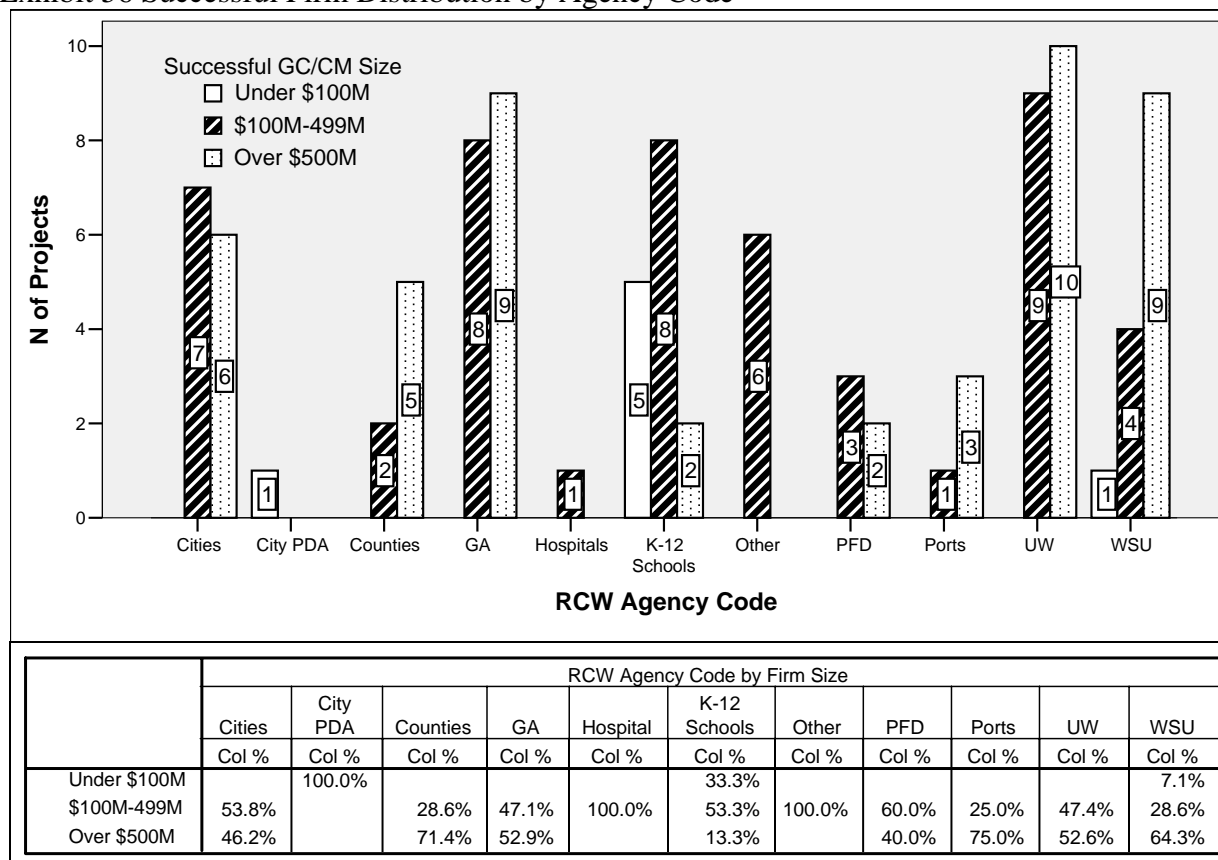
Exhibit 55 Successful Firm Distribution by Year GC/CM Selected



## Agency

In reviewing firm selection by agency code, small firms represented 33% of the K-12 school projects; large firms only represented 13%. See Exhibit 56.

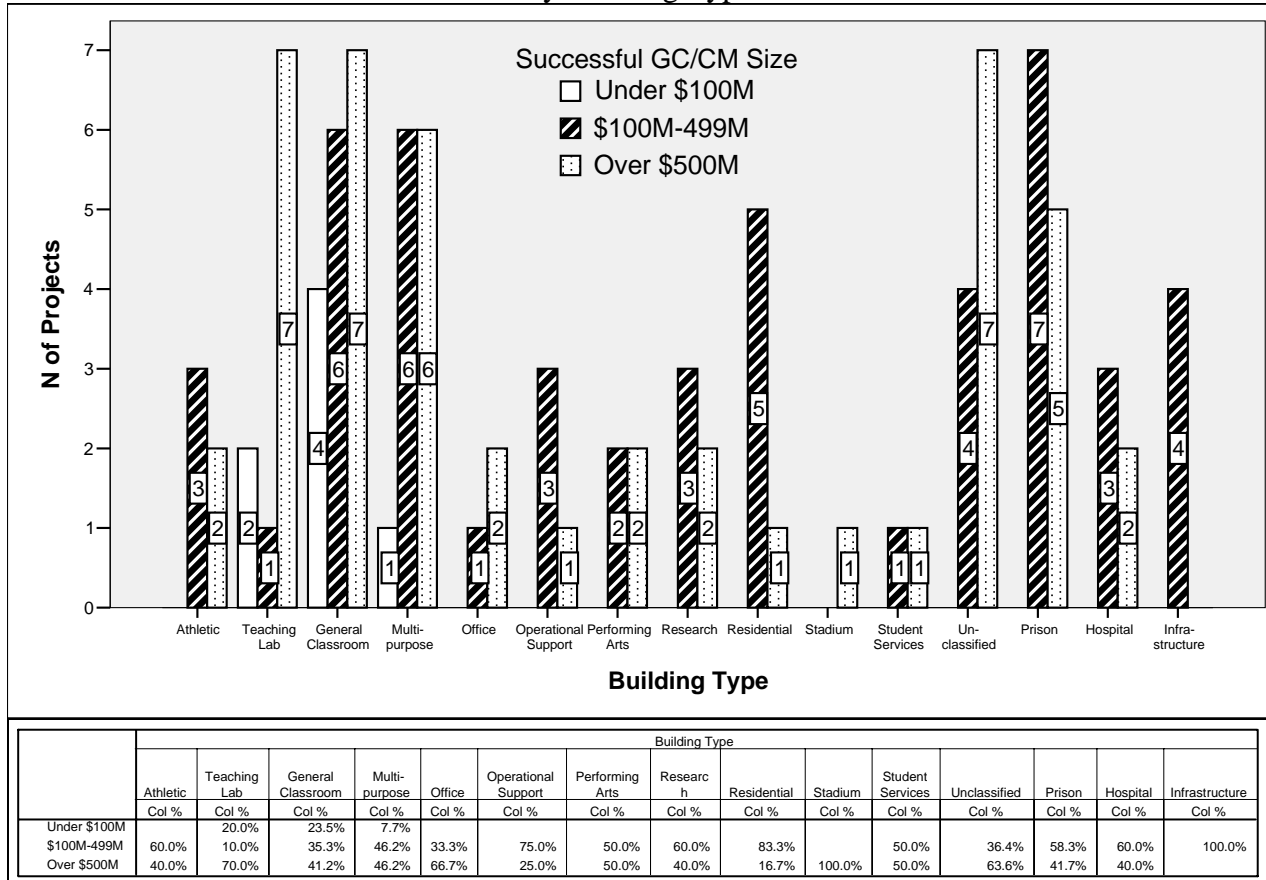
Exhibit 56 Successful Firm Distribution by Agency Code



## Building Type

In reviewing firm selection by building type, small firms represented 22% of general classrooms and teaching labs, midsize firms represented 26%, and large firms 52%. See Exhibit 57.

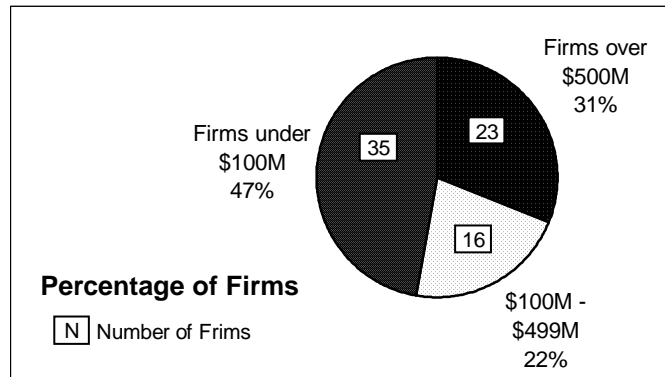
Exhibit 57 Successful Firm Distribution by Building Type



### 6.3.2 Unsuccessful Firms

A total of 74 construction firms competed for 102 GC/CM projects over the 13-year period studied (1991-2004). There were a total of 386 unsuccessful attempts reported; the mean number of firms competing per project was 5.49 firms. Of the total firms competing, 47% were small contractors. See Exhibit 58 for contractor distribution among the three firm size ranges.

Exhibit 58 Successful & Unsuccessful Firms Competing by Size Category



Of the 51 unsuccessful firms, 55% were small contractors. See Exhibit 59 for the unsuccessful contractor distribution among the three firm size ranges.

Exhibit 59 Unsuccessful Firm Size Category

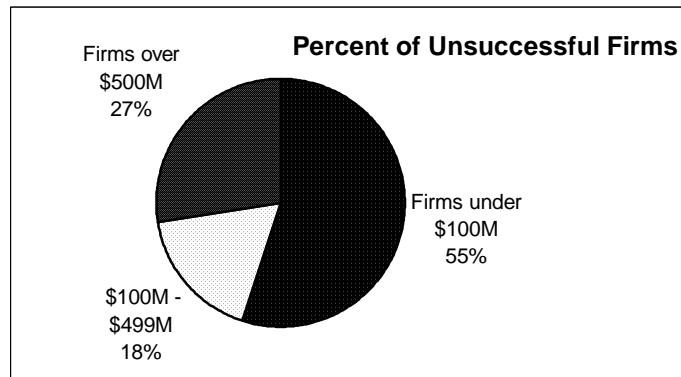
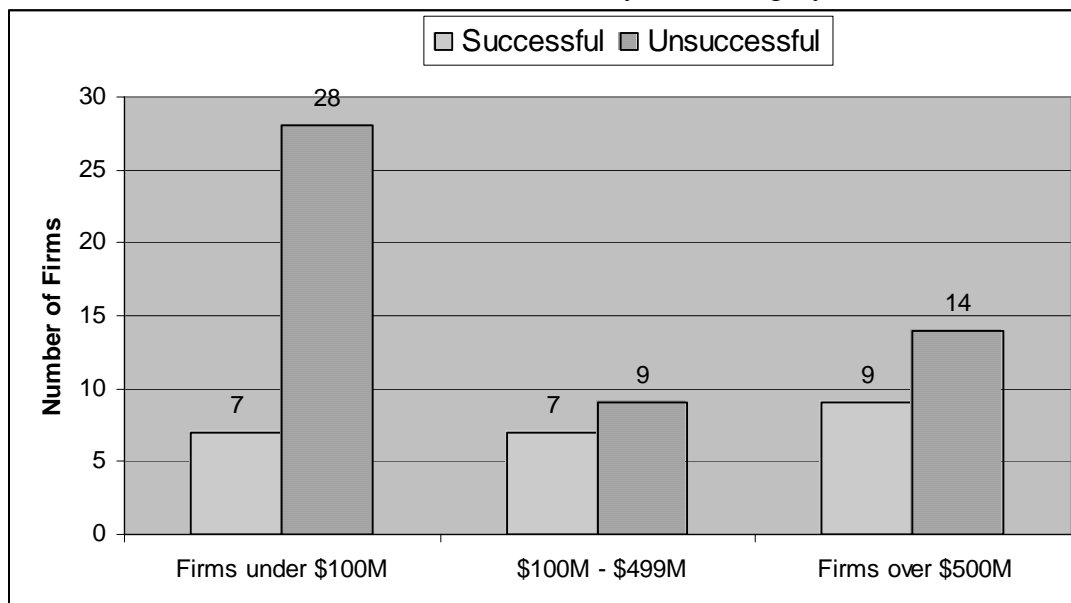


Exhibit 60 compares successful and unsuccessful firms. The number of successful firms within firm revenue size group, 80% of the firms under \$100 million were unsuccessful, 56% of the midsize firms were unsuccessful, and 60% of the large national firms were unsuccessful.

Exhibit 60 Successful and Unsuccessful Firms by Size Category



### 6.3.3 Rate of Success

There were a total of 488 successful and unsuccessful attempts reported for all firms. The average number of attempts was 6.59, the median was 3 attempts. The average number of attempts by successful and unsuccessful contractors by revenue range was:

- Under \$100 million: 2.06 attempts
- \$100 million to \$500 million: 12.44 attempts
- Over \$500 million: 9.43 attempts

The *rate of success* is the number of successful attempts divided by the total number of attempts.

$$\text{Rate of Success \%} = \frac{\text{Successful Attempts \#}}{\text{Total Attempts \#}}$$

For successful firms the average *rate of success* was 35%, the median 33%. The lowest success rate was 9% and the highest was 100% (one firm). The mean number of attempts by successful firms was 15.00 and the median was 6.00. The highest number of attempts by a successful firm was 45.

For unsuccessful firms the *rate of success* is 0%. The mean number of attempts by unsuccessful firms was 2.72 and the median was 1.00. The highest number of attempts by an unsuccessful firm was 19 by one midsize firm. Based on the study data, there is no information to explain why the firm was unsuccessful at winning a project after 19 attempts.

### 6.3.4 Competition Intensity

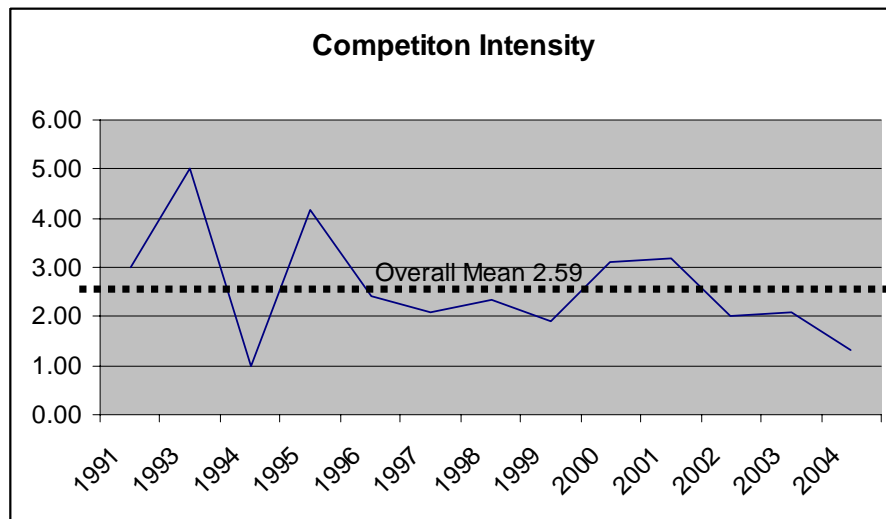
*Competition intensity* is a ratio between the number of firms competing and the number of jobs. The higher the number, the higher the competition; i.e., more firms competing per project.

$$\text{Competition Intensity} = \frac{\text{Number of Firms Competing \#}}{\text{Number of Projects \#}}$$

If there were 5 firms and 5 projects the ratio would be 1; if 5 firms and 10 projects the ratio would be 0.5, indicating less competition intensity.

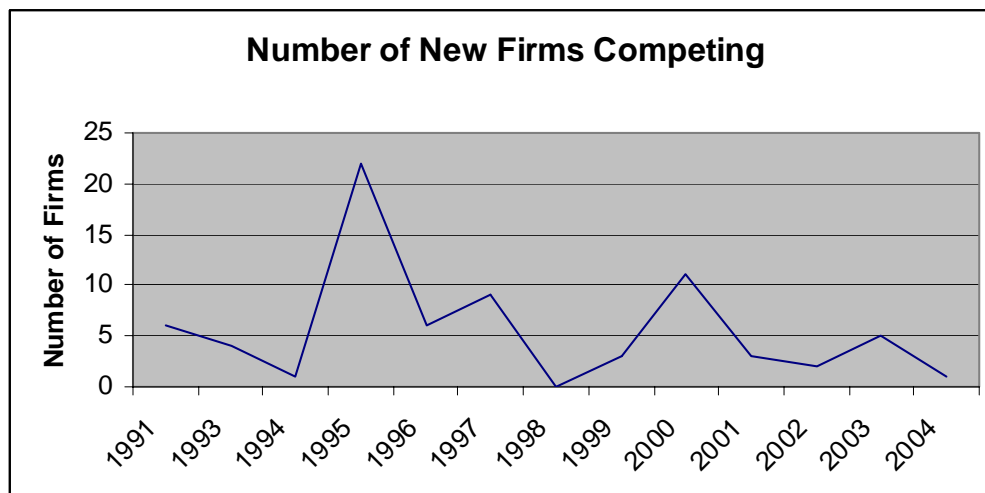
*Competition intensity* was calculated for the total number of firms competing per project per year. Firms were only counted once per year. Over the last five years, the *competition intensity* has decreased to below its overall mean of 2.59. See Exhibit 61.

Exhibit 61 Competition Intensity



The number of new firms entering GC/CM competitions has been declining. See Exhibit 62.

Exhibit 62 Number of New Firms Competing



## **7. Subcontractor Selection Process**

### **7.1 Summary**

GC/CM contractors took good advantage of 1997 changes to RCW 39.10 to self-perform work and prequalify significant trade subcontractors.

Over a third of the projects reported that on average the GC/CM contractors self-performed 2-3 trade packages per project, with a strong preference for performing concrete work. The GC/CM contractors were successful bidders on over eighty percent of the project attempted. The average self performed contract value met the RCW requirements.

Slightly less than a third of the projects prequalified selected subcontractors (usually 4-5), with electrical and mechanical typically prequalified.

One fourth of the project reported information on buyout savings. Buyout is the process of bidding subcontractor packages. A saving occurs when the actual subcontractor's bid is less than the budgeted subcontractor package amount in the MACC. Slightly more than one third of the projects reported no buyout savings. Buyout savings can be allocated to the owner or the GC/CM contractor depending on the terms of the contract. The average allocation was 77% to the owner and 23% to the GC/CM.

### **7.2 Response to Survey**

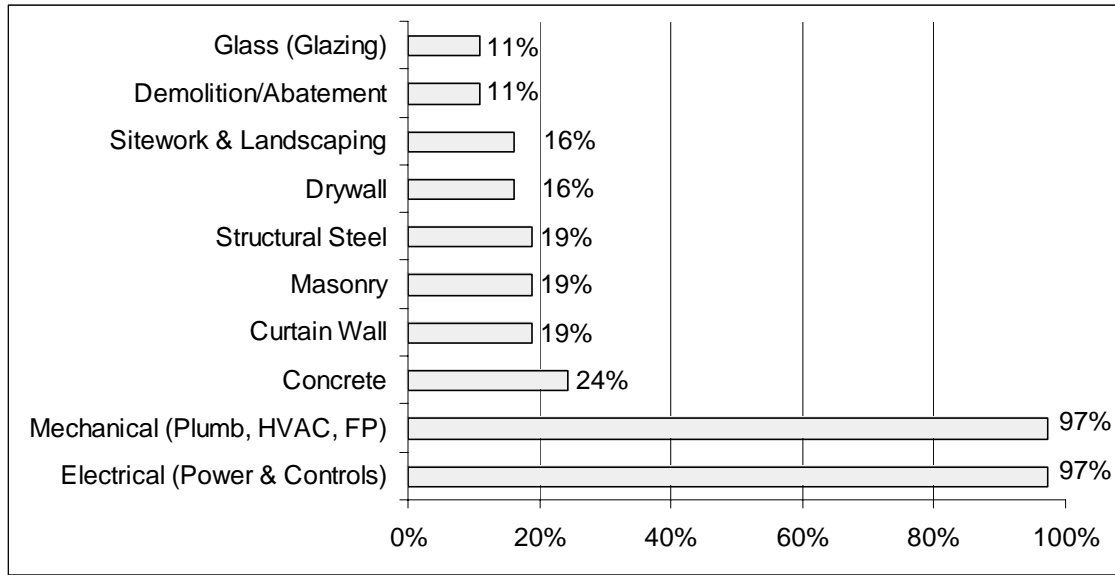
Sixty-one (56%) surveys provided information on subcontracting. The average number of trade bid packages on a project is 30, with a median of 25. The number of trade bid packages ranged from 2 to 158. In 1997, the Legislature revised RCW 39.10 to allow a GC/CM contractor to prequalify subcontractors and a limited amount of work be self-performed by the GC/CM contractor.

### **7.3 Findings**

#### **7.3.1 Prequalification of Subcontractors**

Thirty-four projects prequalified subcontractors. The average number of bid packages that required subcontractor prequalification was 4.7, with a median of 3.5. The number of trades prequalified ranged from 1 to 18 bid packages. Mechanical and electrical trades were most often prequalified. Exhibit 63 diagrams the percentage of the top 10 trades prequalified.

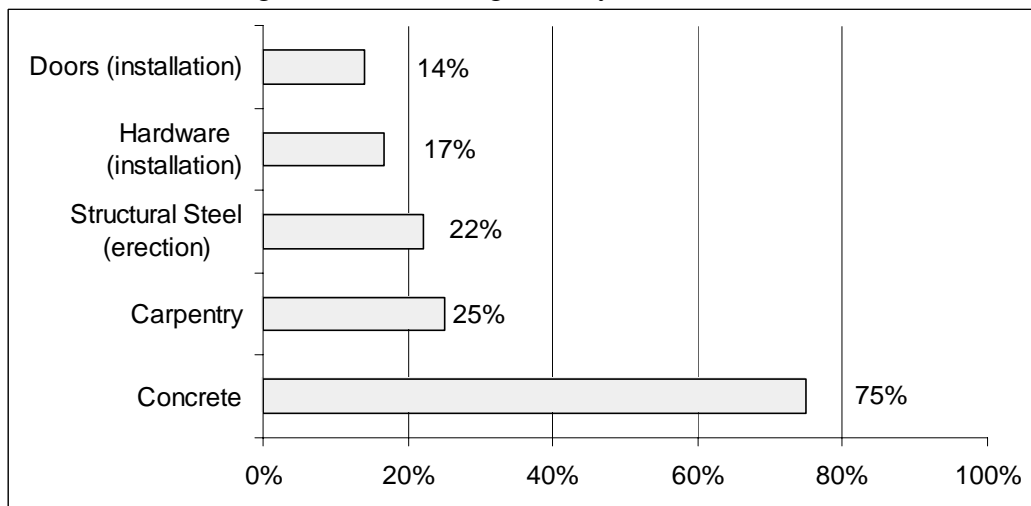
Exhibit 63 Percentage of Trades Prequalified



### 7.3.2 GC/CM Self Performance

Forty-three surveys responded to the question, “Number of subpackages the GC/CM bid on?” The average number of subpackages the GC/CM contractor bid on is 3.42, with a median of 3. The number of bid packages ranged from 0 to 15. Of the completed responses, only two of the projects reported that the GC/CM did not bid on any subpackages. Exhibit 64 diagrams the percentage of the top five trades packages bid by GC/CM contractors.

Exhibit 64 Percentage of Trade Package Bid by GC/CM Contactor





The average number of subpackages awarded to a GC/CM contractor is 2.8, with a median of 2. The award ranged from 0 to 11. GC/CMs unsuccessfully bid on 7 (17%) projects.

Thirty-two projects reported a percentage of work was self-performed by the GC/CM. The contract value of self-performed work ranged from 1.8% to 29%, with a mean of 15.7% and a median of 16.7%.

### **7.3.3 Buyout Savings**

Twenty-seven respondents completed the survey section on buyout savings on finished projects. A *buyout ratio* was used to evaluate buyout savings:

$$\text{Buyout Ratio \%} = \frac{\text{Buyout Difference \$}}{\text{Negotiated GC/CM Construction Contract \$}} \times 100$$

Where:

Buyout Difference is the total budgeted MACC subcontractor dollar amount minus the actual total subcontractor bid dollar amount.

The minimum buyout saving was 0% and the maximum 14%. The mean was 3.35% and the median 1.2%. Ten projects (37%) reported no buyout savings.

Buyout savings can be allocated to the owner or the GC/CM contractor depending on the terms of the contract. The average allocation was 77% to the owner and 23% to the GC/CM. The median was 100% to the owner. Allocation to the owner ranged from 0% to 100%. Sixty-percent of the projects reported the owner receiving 100% of the buyout savings. Allocation to the GC/CM ranged from 0% to 100%. Thirteen percent of the projects reported the GC/CM receiving 100% buyout savings.

## 8. Third Party Consultants

### 8.1 Summary

Owners typically hire a consultant to provide project management service when it does not have in-house staff to manage the project or it needs advise or assistants in a specialty area. Slightly more than half of the GC/CM projects contracted a third-party consultant. Estimating was the most frequent preconstruction service contracted by owners to third parties. Many owners want an independent estimate when negotiating the MACC with the GC/CM contractor.

### 8.2 Response to Survey

Fifty-three percent of the projects contracted a third-party consultant. Twenty-three different firms or agencies provided consultation to the owner on 41 projects. Several firms were hired multiple times; one firm was hired for 8 projects. Of the projects that contracted a third-party consultant, 73% provided preconstruction services. Estimating was the most frequent service contracted. Many owners want an independent estimate when negotiating the MACC with the GC/CM contractor. An owner would hire a consultant to provide this service when it does not have in-house staff to provide it. See Exhibit 65.

Exhibit 65 Third Party Services Contracted

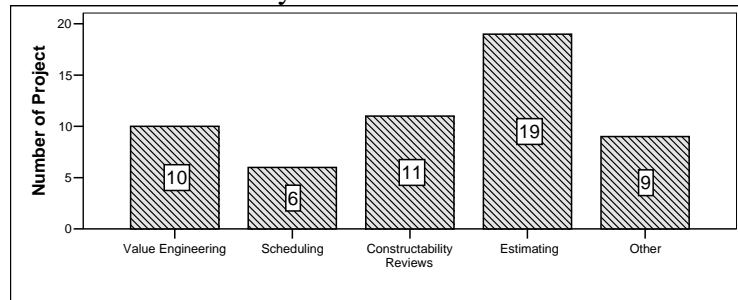
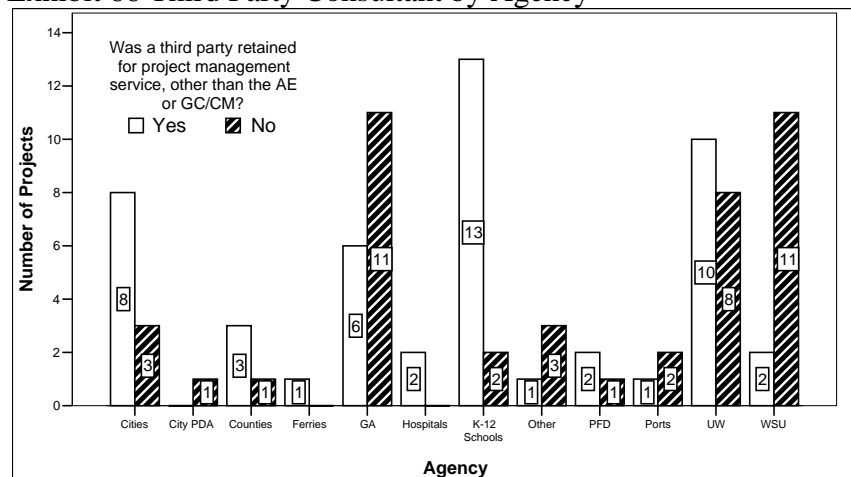


Exhibit 66 summarizes the use of third-party consultants by agency. K-12 schools hired a third-party consultant on 87% of their projects, cities on 72%, and UW on 56%.

Exhibit 66 Third Party Consultant by Agency



## 9. Protests and Claims

### 9.1 Summary

Protests over the GC/CM selection process have been rare. However, protests over the subcontractor selection process have been more frequent, but at a level comparable to traditional DBB selection of a low-responsive bid by a responsible bidder.

Though underreported, construction-phase claims have occurred for the same reasons that they occur under DBB. The GC/CM process's advantages include (1) greater transparency of claims and potential claims due to the GC/CM contractor's "open-book" issue reporting, and (2) design inconsistencies' discovery earlier in the process—before they turn into claims.

Response data is insufficient to get a clear picture of claims' frequency or magnitude. At least two of the projects (Stafford Creek and the Seattle Central Library) experienced significant claims. Each of these projects were very large, complex projects. Having a Dispute Resolution Board (DRB) in place early in construction usually has had a positive impact on claims' resolution. A DRB is a board of impartial professionals that follow construction progress and are available on short notice to resolve disputes for the duration of the project.

### 9.2 Findings

#### 9.2.1 GC/CM Selection Process Protest or Complaints

Eighty-two (76%) responded to the question, "During the selection process were any protests or complaints filed?" Ninety-seven percent of the projects reported no contractor protests during the selection process. Only two projects reported contractor protests. See Exhibit 67.

Exhibit 67 GC/CM Protest Filed

	Agency Code	Project Name	Year GC/CM Approved	Is project complete?
1	City of Everett	Water Pollution Control Facility Phase A	1993	No
2	Tacoma School District	Lincoln High School	2003	No

#### Water Pollution Control Facility Phase A

MA Mortenson ended up #2. It protested to the City Council that it should have been selected based on its price—when low price was the selection criterion. Mortenson argued that it was less expensive than Hoffman for predesign and construction services. Mortenson's protest was unsuccessful.

#### Lincoln High School

Turner Construction, one of three finalists, failed to include the specified \$300,000 preconstruction services fee in its total proposal price as required on the Proposal Form. Turner protested the award of the contract to Lease Crutcher Lewis, claiming that its

obvious mathematical error should be waived and its proposal price adjusted accordingly which would make Turner's price the median proposal price and Turner the winner. Based on the recommendation of legal counsel, the District rejected Turner's claim and awarded the contract to Lease Crutcher Lewis.

### 9.2.2 Subcontractor Protest or Complaints

Fifty surveys (46%) responded to the question, “During the subcontractor selection process were any protests or complaints filed?” Twenty-two percent (11 projects) reported subcontractor protests.

Forty-nine surveys (45%) responded to the question, “Were any formal subcontractor claims filed?” Twenty percent (10 projects) reported subcontractor claims filed. See Exhibit 68.

Exhibit 68 Formal Subcontractor Claims

	Agency Code	Project Name	Year GC/CM Approved	Is project complete?
1	GA/DOC	Airway Heights Corrections Center	1991	Yes
2	Pierce County	Adult Detention Facility Construction	1996	Yes
3	University of Washington	Bioengineering-Genome Sciences Building	2002	No
4	Spokane PFD	Spokane Convention Center Expansion	2003	No
5	GA	WA Sate Legislative Building Rehabilitation	2000	No
6	Seattle School District	Roosevelt High School	2002	No
7	GA/DOC	Stafford Creek Corrections Center, Phase 1&2	1995	Yes
8	City of Seattle	McCaw Hall	2000	Yes
9	City of Seattle	Seattle Central Library	1999	Yes
10	University of Washington	EE/CSE Phase 2 Expansion	1999	Yes

### 9.2.3 Project Formal Claims

Forty-eight surveys (44%) responded to the question, “Were there any formal claims between the Owner/Agency and the GC/CM?” Only 15% (7 projects) reported formal claims between the GC/CM and the owner. From the authors’ personal knowledge, claims are underreported. This may be attributed to a lack of clarity over the question, but is more likely a product of incomplete survey response data.

Of the 7 projects reporting claims, 6 reported one claim and one project reported 66 claims. Only 4 projects reported claim settlement dollar amounts. The claim percentage is the claim settlement amount divided by construction contract costs.

$$\text{Claim Percentage \%} = \text{Claim Settlement \$} / \text{Negotiated Construction Contract \$}$$

One project reported a claim percentage under 1%, two projects reported 3%, and one reported 4.67%. See Exhibit 69. The mean claim percentage was 3%.

Exhibit 69 Formal Claims between the Owner and GC/CM Contractor

	Agency Code	Project Name	Year GC/CM Approved	Is project complete?	Claim %
1	GA/DOC	Airway Heights Corrections Center	1991	Yes	3.22
2	Pierce County	Adult Detention Facility Construction	1996	Yes	.
3	Seattle School District	Roosevelt High School	2002	No	.
4	GA/DOC	Stafford Creek Corrections Center, Phase 1 & 2	1995	Yes	4.67
5	City of Seattle	Seattle Central Library	1999	Yes	.
6	Seattle Public Housing Authority	NewHolly Ph. 2	1999	Yes	.54
7	Port of Seattle	SeaTac Parking Garage	1995	Yes	3.11

## 10. Quality Performance

### 10.1 Summary

In evaluating quality performance respondents were asked if the agency has established standards and if so were they employed on the project. Seventy-eight percent of the projects surveyed reported quality standards and 81% of these projects employed those standards. Only one project, Stafford Creek Corrections Center, did not meet the owner's quality standards.

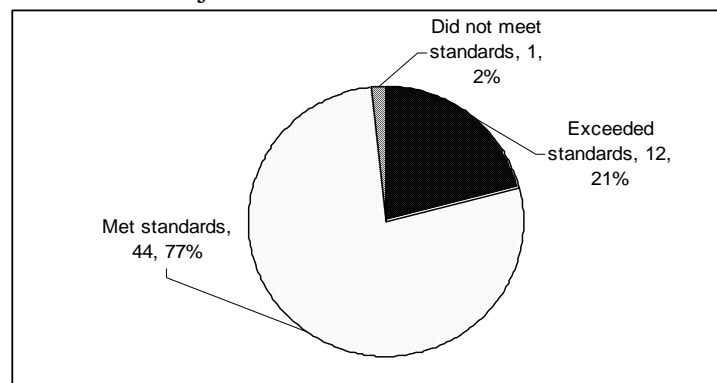
The survey asked to respondents to describe their quality standards. Some reported quality standards as:

- Incorporating agency specific performance standards in the specifications
- Contract specifications that describe quality standards that the GC/CM contractor has to meet. Such as, IBC building codes and local jurisdiction standards, ASHRAE, UL, life safety requirements, the EPA Indoor Air Quality and Schools Health and Safety Guides.
- Contract documents requiring the GC/CM contractor to have a quality program and individual responsible for it.
- An agency providing an in-house quality control manager, the contractor providing a quality control manager, working together in a team concept.
- Subconsultants and the architect review /inspect the project frequently during construction to assure quality standards are met or exceeded.
- The use of performance evaluation reports with categories by points from inadequate to superior. The GC/CM contractor is assigned a percent score based on points assigned / total point possible.

### 10.2 Findings

Eighty surveys (74%) responded to the question, "Does your agency have established quality standards?" Seventy-eight percent of the projects responded yes and 21% projects responded no. Seventy surveys (64%) responded to the question, "Were they (quality standards) employed on this project?" Eighty-one percent of the projects responded yes and 19% projects responded no. Respondents were asked to evaluate project performance where: 1 = Exceeded Standards, 2 = Met Standards, 3 = Did not meet standards. Fifty-seven surveys (52%) evaluated project performance. Ninety-eight percent of the completed projects met or exceeded standards. Only GA/DOC's Stafford Creek Corrections Center project did not meet standards. See Exhibit 70.

Exhibit 70 Project Performance



## 11. References

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Committee on Construction Change Orders, Building Research Board, National Research Council (1986). “Construction Contract Modifications: Comparing the Experiences of Federal Agencies with Other Owners.”

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HB 1070 (Ch. 209, Laws of 2000). “School District Project Review Board.”

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Goldblatt, Steve and Septelka, Darlene (2000). “Washington State Alternative Public Works Method Oversight Committee Study.” State of Washington.

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Means, R.S. Co. Inc. (2005). “2005 Square Foot Costs,” 26<sup>th</sup> Annual Edition.

Oregon Public Contracting Coalition (2000). “Oregon Public Contracting Coalition Guide to CM/GC Contracting.”

Septelka, Darlene (1997). “An Investigation of Change Orders in the Private Sector.” MSCM thesis, University of Washington.

SHB 1425 (Ch. 376, Laws of 1997). “Alternative Public Works Contracting Procedures.”

## Appendix A Glossary

Note: Some of the following definitions were modified from the Oregon Public Contracting Coalition Guide to CM/GC Contracting:

**Alternative Contracting Method:** A selection method other than competitive, low-bid (Design-Bid-Build method) that generally considers other factors in addition to cost for the selection of a contractor. The most common alternative contracting methods are Design-Build and GC/CM (CM at Risk).

**Best Value:** Also known as “greatest value”. Any selection process in which proposals contain both price and qualitative components, and award is based upon a combination of price and qualitative considerations. Qualitative can be further subdivided into technical, aesthetic, and management factors.

**Bid Package:** A subset of the overall scope of work that relates to a specific work trade and for which a single contract is let. A project’s scope of work is comprised of multiple bid packages.

**Buyout:** Buyout is the process of purchasing the project and is the actual cost of all subcontracts, purchase orders, change orders, and general conditions work.

**Buyout Difference:** The total budgeted MACC subcontractor dollar amount minus the actual total subcontractor bid dollar amount. A positive difference is known as buyout savings to the project.

**Buyout Ratio:** The ratio between the buyout difference and the negotiated GC/CM construction contract amount.

**Change Order:** A directive, usually authorized in writing by the owner, to alter or modify some aspect of a project. Such a directive is generally accompanied by an adjustment to the contract amount and/or the contract duration.

**Change Order Ratio (COR):** The total dollar amount of contract changes divided by the original GC/CM construction contract dollar amount.

**Competition Intensity:** The ratio between the number of firms competing and the number of jobs.

**Constructability:** A project property that reflects the ease with which the project can be built and the quality of the design documents.

**Construction Documents:** The documents developed to construct the project. Also used to signify the portion of the design phase, approximately from 60% to 100% completion of the design, in which the details of the design are developed, the design documents are finalized, and the construction documents are prepared.



**Construction Contract Cost Growth:** The percentage by which the GC/CM construction contract cost grew over the life of the project.

**Construction Schedule Growth:** The percentage by which the construction schedule grew over the life of the project.

**Construction Speed (sf/day):** The rate at which the construction team built the facility.

**Contingency:** An amount of funds set aside to cover unforeseen occurrences that arise during the course of the project.

**Contingency Growth:** The percentage by which the contingency grew over the life of the project.

**Cost Growth:** The percentage by which the project cost grew over the life of the job.

**Cost Incentive:** A fee component that an agency establishes to motivate the GC/CM to achieve specific project objectives.

**Delivery Speed (sf/day):** The rate at which the project team designed and built the facility.

**Design-Bid-Build (DBB):** The “traditional” project delivery approach where the owner commissions an architect or engineer to prepare drawings and specifications under a design services contract, and separately and subsequently contracts for construction by engaging a contractor through competitive bidding or negotiation.

**Detailed Design:** The portion of the design phase, from approximately 30% to 60% completion of the design, in which the primary details of the design are developed.

**Dispute Resolution Board (DRB):** Is a board of impartial professionals formed at the beginning of the project to follow construction progress and available on short notice to resolve disputes for the duration of the project. The DRB process helps the parties head off problems before they escalate into major disputes. When a dispute flowing from the contract or the work cannot be resolved by the Agency and the GC/CM, it can be referred to the DRB. While the DRB recommendation for resolution of a dispute is non-binding, the DRB process is most effective if the contract language includes a provision for the admissibility of a DRB recommendation into any subsequent arbitration or legal proceeding.

**Fast-Track Construction:** Any process in which design and construction activities overlap. Design documents, equipment procurement, and trade subcontracts are released incrementally or in phases.

**General Contractor/Construction Management (GC/CM):** Is a delivery system where the contractor is hired during the design process to assist the owner in managing the project by

providing pre-construction and construction management services. It is also known as Construction Management at Risk (CMR) or CM/GC.

**GC/CM Construction Contract Value:** The combined total of the maximum allowable construction cost (MACC), GC/CM fee, and general conditions (GC).

**General Conditions (GC):** The costs associated with on-site management and supervision of the work including the costs of insurance, bonds, and other related miscellaneous items.

**Intensity of Delivery ((\$/sf)/day):** The unit cost of design and construction work put in place in a facility per unit time.

**Maximum Allowable Construction Cost (MACC):** A cost-plus contract in which the GC/CM agrees to bear any construction costs that exceed the maximum agreed upon price unless the project scope of work is increased.

**Owner:** The entity for which the project is being designed and built, and with which the A/E and GC/CM firms will be in privity of contract.

**Owner's Consultant:** A consultant or consulting firm that is employed or engaged by an owner to assist in the organizing and administering the GC/CM selection process, and for other consulting services such as developing criteria, review of the detailed design and construction for compliance with the RFP.

**Procurement:** The purchasing of design or construction services.

**Rate of Success:** The number of successful attempts at winning a project divided by the total number of attempts.

**Request for Proposals (RFP):** The document issued by the owner that describes the procurement process, forms the basis for final proposals, and may become an element in the contract. The RFP consists of proposal requirements, contract requirements, program requirements, and performance requirements.

**Request for Qualifications (RFQ):** The document issued by the owner prior to an RFP that typically describes the project in enough detail to allow potential proposers to determine if they wish to compete and requests limited statements of qualification. The RFQ forms the basis for selecting finalists in a two-phase or shortlisting process.

**RFI:** Request for Information

**Schedule Growth:** The percentage by which the project schedule changed from the original timeline over the life of the project.

**Schematic Design (SD):** The portion of the design phase, from 0% to approximately 30% completion of the design, in which the major features of the design are laid out.

**Scope of Work:** The work incorporated into a contractual agreement.

**Shortlisting:** Narrowing the field of proposers through the selection, on the basis of qualifications, of the most qualified to perform the project. The number of shortlisted proposers invited to submit final proposals is most frequently between three and five. See *Request for Qualifications*.

**Specifications:** A qualitative description of the project and any additional information not present in the drawings. The technical specifications essentially describe the quality of the various aspects of the construction work and project features.

**Submittals:** Information concerning products to be incorporated in a construction project that must be approved by the owner before they are used. This information may include samples, calculations, performance tests, and manufacturer's literature.

**Substantial Completion:** A designation of when a project is sufficiently finished to be occupied by the owner and used for its intended purpose. The duration of the project is measured against substantial completion to determine when the last periodic payment can be made.

**Unit Cost (\$/sf):** A measure to indicate the relative cost of a facility for its given area.

**Value Engineering (VE):** A procedure in which the GC/CM firm, through an investment in additional architectural and engineering design, reduces prices or increases scope, or both, enhancing value by determining the most cost-effective means of achieving the owner's objectives. Value engineering should not to be confused with mere scope reduction to reduce cost.

## Appendix B Copy of Survey

<b>Washington State Joint Legislative Audit and Review Committee</b> <b>GC/CM Project Evaluation - 2005 Study</b>			
<i>Please complete the following survey with appropriate data for this project.</i>			
<b>1.0 Project</b>			<b>Survey Project Code</b>
Agency:	Type in Agency Name		Survey Code
Project Name:	Type in Project Name		
Agency Project Number:	Enter Agency #	OFM Number (State projects only):	Enter OFM #
Date of Alternative Delivery Approval (Month/Year)	xx/xx/xx		
Is project completed?	<input type="checkbox"/> YES <input type="checkbox"/> NO		
If not complete what phase is the project currently in?	<input type="checkbox"/> Planning <input type="checkbox"/> Design <input type="checkbox"/> Construction		
Building Type:	1. Athletic 2. Teaching Lab		XX % New Construction    XX % Renovation
Construction Type :	1. Heavy – cast in place concrete		
Building Size:	Gross Area - New sq. ft.	xx,xxx	Gross Area - Renovated sq. ft. xx,xxx
Was a third party retained for project management service, other than the AE or GC/CM? <input type="checkbox"/> YES <input type="checkbox"/> NO			
Name of third party consultant: Type in name of third party consultant			
<b>2.0 Schedule</b>			
	<b>Planned</b>		<b>Actual</b>
	<b>Start Date</b>	<b>Finish Date</b>	
Overall Project	xx/xx/xx	xx/xx/xx	xx/xx/xx
Design*	xx/xx/xx	xx/xx/xx	xx/xx/xx
Construction	xx/xx/xx	xx/xx/xx	xx/xx/xx
Substantial Completion		xx/xx/xx	xx/xx/xx
Final Acceptance		xx/xx/xx	xx/xx/xx
* Note: Design Start Date is when the architect of record is hired, Design Finish Date is completion of construction documents			
Was the project completed on time? <input type="checkbox"/> YES <input type="checkbox"/> NO			
If no, please summarize below:			
<div style="border: 1px solid black; height: 20px; margin-bottom: 5px;"></div> <div style="border: 1px solid black; height: 20px; margin-bottom: 5px;"></div> <div style="border: 1px solid black; height: 20px; margin-bottom: 5px;"></div>			
Stage design was in at GC/CM selection: <input type="checkbox"/> Project Feasibility <input type="checkbox"/> Schematic Design <input type="checkbox"/> Construction Docs <input type="checkbox"/> Programming <input type="checkbox"/> Design Development    % Complete    XX%			
Stage design was in at final (MACC) contract agreement: <input type="checkbox"/> 50% <input type="checkbox"/> 70% <input type="checkbox"/> 90% <input type="checkbox"/> 60% <input type="checkbox"/> 80% <input type="checkbox"/> 100%			
<b>3.0 Cost</b> (Note: Construction costs not to include sales tax, acquisition, fixtures, furniture, or equipment)			
	<b>Project Budgeted</b>	<b>Actual</b>	
Total Project	\$ xxx,xxx,xxx	\$ xxx,xxx,xxx	
Total Management Costs	\$ xxx,xxx,xxx	\$ xxx,xxx,xxx	
Total Design Costs	\$ xxx,xxx,xxx	\$ xxx,xxx,xxx	
Total Construction Costs	\$ xxx,xxx,xxx	\$ xxx,xxx,xxx	

## Appendix B Copy of Survey -continued

### 3.0 Cost, continued (Note: Construction costs not to include sales tax, acquisition, fixtures, furniture, or equipment)

	Negotiated	Actual
MACC	\$ xxx,xxx,xxx	\$ xxx,xxx,xxx
Fee Percentage of MACC	XX %	XX %
Fee	\$ xxx,xxx,xxx	\$ xxx,xxx,xxx
Preconst.Services	\$ xxx,xxx,xxx	\$ xxx,xxx,xxx
General Conditions	\$ xxx,xxx,xxx	\$ xxx,xxx,xxx

Was the project completed within budget?

☐ YES☐ NO

If no, please explain:


Were there any contingency funds set aside on this project?

☐ YES☐ NO

	Contingency	
	Project/Owner	GC/CM Contingency
Amount budgeted	\$ xxx,xxx,xxx	\$ xxx,xxx,xxx
Actual Amount Used	\$ xxx,xxx,xxx	\$ xxx,xxx,xxx
Who controlled the contingency?	1. Owner	1. Owner
	2. GC/CM	2. GC/CM
Allocation % to Owner	XX %	XX %

Were cost incentives utilized on this project (excluding buyout)?

☐ YES☐ NO

If yes, please describe and include how incentives were managed?


Final incentive amount paid to GC/CM:

\$ xxx,xxx,xxx

### 4.0 Changes and Claims

Change Order Dollar Volume			
Owner's Scope	\$ xxx,xxx,xxx	Other:Type	\$ xxx,xxx,xxx
Design Error/Omission	\$ xxx,xxx,xxx	Other:Type	\$ xxx,xxx,xxx
Unforeseen Conditions	\$ xxx,xxx,xxx	Other:Type	\$ xxx,xxx,xxx
Contractor	\$ xxx,xxx,xxx	Other:Type	\$ xxx,xxx,xxx
Total Change Orders			\$ xxx,xxx,xxx

Were there any formal Claims between the Owner/Agency and the GC/CM?

☐ YES☐ NO

Number of Claims XX

Settlement Amount-Total

\$ xxx,xxx,xxx

Please summarize Claims below and explain how they were settled and describe your dispute resolution mechanism (DRB, arbitration, litigation):


## Appendix B Copy of Survey -continued

### 5.0 GC/CM Process Evaluation

Total number of firms competing in the GC/CM selection process?

XX

Name of successful firm:

Type in name of successful firm

Name of unsuccessful firms: 1 Name of Firm

6 Name of Firm

2 Name of Firm

7 Name of Firm

3 Name of Firm

8 Name of Firm

4 Name of Firm

9 Name of Firm

5 Name of Firm

10 Name of Firm

During the selection process were any protests or complaints filed?

☐ YES☐ NO

If yes, please describe below:


Was a third party, other than the A/E or GCCM, retained for any of the following preconstruction services? (Please check all that apply)

☐ Value Engineering☐ Constructability Reviews☐ Other:

Type in other service

☐ Scheduling☐ Estimating☐ Other:

Type in other service

### 6.0 Subcontract Packages

Number of bid packages utilized on this project?

##

Did the GC/CM prequalify any subcontractors?

☐ YES☐ NO

If yes:

Was there a public notice for request for prequalifications?

☐ YES☐ NO

What trades/bid packages were prequalified?

Name Trades


Number of bid packages the GC/CM bid on?

##

Number of bid packages the GC/CM performed?

##

Total dollar volume of self-performed work

\$ xxx,xxx,xxx

% of contract value

XX %

What trades/bid packages were self performed?

Name Trades


During the subcontractor selection process were any protests or complaints filed?

☐ YES☐ NO

If yes, please describe below:


Were any formal subcontractor Claims filed?

☐ YES☐ NO

If yes, please describe below:


Total difference between budgeted and actual buyout.

\$ xxx,xxx,xxx

How were buyout savings, if any, allocated?

Owner/Agency % XX%

GC/CM Firm % XX%

## Appendix B Copy of Survey –continued

<b>7.0 Quality</b>					
Does your agency have established quality standards?	<input type="checkbox"/> YES <input type="checkbox"/> NO				
Were they employed on this project?	<input type="checkbox"/> YES <input type="checkbox"/> NO				
Evaluate project performance to established quality standards:					
<input type="checkbox"/> Exceeded Standards	<input type="checkbox"/> Met Standards <input type="checkbox"/> Did Not Meet Standards				
Describe quality standards:					
<table border="1"><tr><td> </td></tr><tr><td> </td></tr><tr><td> </td></tr></table>					
<b>Do you have any additional comments?</b>					
<table border="1"><tr><td>Type in additional comments</td></tr><tr><td> </td></tr><tr><td> </td></tr><tr><td> </td></tr></table>		Type in additional comments			
Type in additional comments					
Survey completed by: Name _____	Title: _____				
Phone Number: _____	Email Address _____				
If you have any questions on completing the survey please contact J. Isabel Muñoz-Colón at (360) 786-5179					

***Thank you for taking time to complete this survey.***

***Please return survey to GCCMSTUDY@aol.com no latter than  
Feb. 18, 2005***

## Appendix B Copy of Survey -continued

<p align="center"><b>Washington State Joint Legislative Audit and Review Committee</b>  <b><i>GC/CM Project Evaluation - 2005 Study</i></b></p>
<p><b><u>Construction Type Definitions</u></b></p> <ol style="list-style-type: none"> <li>1. Heavy – cast in place concrete</li> <li>2. Medium – masonry, protected steel, tilt-up, or heavy timber</li> <li>3. Light – Wood or light steel stick frame or prefabricated steel</li> <li>4. Temporary – portables, modular buildings</li> </ol> <p>Note: Construction type is the predominant facility structural system defining the construction cost.</p>
<p><b><u>Building Type Classifications</u></b></p> <p>Projects which involve construction or renovations of buildings should be categorized into one of the following use types:</p> <ol style="list-style-type: none"> <li>1. Athletic</li> <li>2. Teaching Lab</li> <li>3. General classroom</li> <li>4. Greenhouse</li> <li>5. Multipurpose</li> <li>6. Office</li> <li>7. Operational Support</li> <li>8. Performing Arts</li> <li>9. Research</li> <li>10. Residential</li> <li>11. Stadium</li> <li>12. Student Services</li> <li>13. Study</li> <li>14. Unclassified</li> <li>15. Prison                         <ol style="list-style-type: none"> <li>a. Pre-release Security Level 1</li> <li>b. Minimum Security Level 2</li> <li>c. Medium Security Level 3</li> <li>d. Close Security Level 4</li> <li>e. Maximum Security Level 5</li> </ol> </li> <li>16. Mental Health Facility</li> <li>17. Hospital</li> <li>18. Food Facility Services</li> <li>19. Infrastructure</li> <li>20. Storage Facility Center</li> <li>21. Readiness Center</li> </ol> <p>(Note: these categories are for higher education buildings from the JLARC Comparable Framework. Additional building types for other functional areas of government will be added after consultation with agencies. For buildings with multiple uses, building type should be based on the predominate use, consistent with the procedure used in compiling the Comparable Framework. Facilities with more than one dominant should be classified based on the facility's major replacement cost drivers. For example, a facility with large amounts of both research lab space and office space would be classified into the "research" category, because the facility's major systems would generally be designed to support the research function.)</p>
<p><b><u>Who Controls the Contingency Classifications</u></b></p> <ol style="list-style-type: none"> <li>1. Owner</li> <li>2. GC/CM</li> <li>3. Architect</li> <li>4. Owner's CM Cons.</li> </ol>



Appendix C Project Information Summary

2005 Survey Project Code	RCW Code	Agency	Project Name	Is project complete?	Year GC/CM Approved	Building Type	Construction Type	Percentage - New Construction	Percentage - Renovation	Total Gross Area (sq ft)	Total project cost budget	Contract Budget (MACC+Fee+GC)	Contract Cost per Sq Ft (Contract Budget/Total Gross Area)
6	Cities	Bellevue	New City Building Redevelopment	No	2003	Office	Heavy	10	90	360,000	\$101,550,000	\$63,093,512	\$175
12	Cities	Everett	Water Pollution Control Facility Phase A	No	1993	Infrastructure	Heavy	.	.	.	\$25,000,000	\$37,373,141	.
88	Cities	Seattle	Aquarium, Pier 59 Renovations	No	2004	Multipurpose	Heavy	0	100	42,100	\$24,041,000	.	.
41	Cities	Seattle	City Fire Station #10	No	2004	Multipurpose	Heavy	100	0	60,000	\$39,600,000	.	.
31	Cities	Seattle	City Justice Center	Yes	1999	Multipurpose	Heavy	100	0	288,000	\$92,000,000	\$76,068,328	\$264
11	Cities	Seattle	Landsburg Fish Passage & Diversion Facility	Yes	2000	Unclassified	Heavy	85	15	3,400	\$14,650,000	\$9,673,886	\$2,845
43	Cities	Seattle	McCaw Hall	Yes	2000	Performing Arts	Heavy	70	30	296,000	\$127,780,000	\$99,633,466	\$337
109	Cities	Seattle	Park 90-5	Yes	.	Unclassified	.	.	.	.	.	.	.
95	Cities	Seattle	Police West Precinct Station and Community	Yes	1996	Unclassified	.	.	.	.	\$19,680,000	\$24,367,600	.
32	Cities	Seattle	Seattle Central Library	Yes	1999	Unclassified	Heavy	100	0	425,000	\$155,651,000	\$96,797,000	\$228
30	Cities	Seattle	Seattle City Hall	Yes	1999	Multipurpose	Heavy	100	0	200,000	\$72,000,000	\$61,176,816	\$306
111	Cities	Seattle Public Utilities	Cedar River Sockeye Hatchery Project	No	2003	Unclassified	Light	100	0	15,000	.	.	.
29	City PDA	Seattle-Chinatown International District	International District Village Square Ph	Yes	2000	Multipurpose	Medium	100	0	133,000	\$26,324,000	\$14,706,000	\$111
33	Counties	King County	King County Courthouse	No	.	Teaching Lab	Heavy	.	.	.	.	.	.
34	Counties	King County	King County Jail	No	.	Prison	.	.	.	.	.	.	.
28	Counties	King County, Department of Natural Resource	Brightwater Treatment Facility	No	2003	Infrastructure	Heavy	100	0	.	\$639,610,404	.	.
38	Counties	Pierce County	Adult Detention Facility Construction an	Yes	1996	Prison	Heavy	90	10	216,500	\$53,700,000	\$40,085,017	\$185
97	Counties	Snohomish County	Denney Juvenile Justice Center	Yes	1996	Prison	.	.	.	.	\$24,000,000	\$17,720,898	.
98	Counties	Snohomish County	Snohomish County City Redevelopment	Yes	.	Unclassified	.	.	.	.	.	.	.
71	Ferries	Washington State Ferries	Anacortes Terminal Relocation	No	2004	Operational Support	Medium	100	0	54,000	\$19,200,000	.	.
27	GA	GA	WA Sate Legislative Building Rehabilitation	No	2000	Office	Heavy	0	100	235,500	\$101,000,000	\$67,308,191	\$286
15	GA	GA/Cascadia CC	UW-CCC Bothel Branch Campus Phase I & II	Yes	1997	Multipurpose	Heavy	100	0	439,500	\$197,140,000	\$117,529,299	\$267
26	GA	GA/Department of Veterans Affairs	WA State Veterans Home	No	2002	Residential	Medium	100	0	171,775	\$47,335,399	\$33,641,520	\$196
106	GA	GA/DOC	Airway Heights Corrections Center	Yes	1991	Prison	.	.	.	.	\$113,000,000	\$83,642,219	.
10	GA	GA/DOC	Larch & Cedar Creek Corrections Centers	No	1995	Prison	Light	90	10	147,395	\$22,000,000	\$14,082,850	\$96
16	GA	GA/DOC	Monroe Close Custody Conversion & Repair	Yes	1997	Prison	Medium	50	50	61,000	\$4,375,588	\$3,000,840	\$49
17	GA	GA/DOC	Special Offender Unit--Expand to 400 bed	Yes	1996	Prison	Heavy	98	2	110,500	\$42,942,628	\$30,071,315	\$272
18	GA	GA/DOC	Stafford Creek Corrections Center, Phase	Yes	1995	Prison	Heavy	100	0	559,519	\$197,573,938	\$128,157,451	\$229
20	GA	GA/DOC	Washington State Reformatory - 400 Bed A	Yes	1995	Prison	Light	100	0	92,400	\$18,733,120	\$12,219,152	\$132
8	GA	GA/DOC	WCC 97-99 Correctional Industries & Mast	Yes	1997	Multipurpose	Light	100	0	27,000	\$4,161,184	\$2,928,807	\$108
72	GA	GA/DOC	WCCW Mental Health & Recep.	Yes	1997	Prison	Medium	100	0	55,500	\$24,800,000	\$13,372,982	\$241
19	GA	GA/DOC	WCCW Replace G Units with 256 Bed Housing	Yes	1995	Prison	Heavy	100	0	40,742	\$9,929,026	\$8,360,190	\$205
22	GA	GA/Everett CC	Glacier/Pilchuck & Monte Cristo - Arts &	No	2004	Multipurpose	Heavy	100	0	87,500	\$26,297,300	\$19,443,457	\$222
23	GA	GA/Everett CC	Undergraduate Education Center	No	.	Multipurpose	Medium	98	2	83,932	\$34,897,240	.	.
24	GA	GA/Highline CC	HCC/CWU Higher Education Center	No	2001	Multipurpose	Heavy	100	0	84,000	\$30,828,000	\$19,666,000	\$234
25	GA	GA/South Puget Sound	Science Complex Addition	No	.	Teaching Lab	Medium	90	10	65,000	.	.	.
86	GA	GA-BCC	Robinswood School Replacement (Bldg R)	Yes	1999	General classroom	Heavy	100	0	87,500	\$24,000,000	\$17,257,185	\$197
110	GA	GA-DOC	Washington Corrections Center for Women	Yes	1991	Prison	.	.	.	.	\$32,000,000	.	.
21	GA	GA-DSHS	Special Commitment Center Construction	Yes	2000	Unclassified	Medium	67.5	32.5	166,747	\$61,665,000	\$51,946,768	\$312
46	Hospitals	Skagit Valley Public Hospital District #	Island Hospital	No	2005	Hospital	Medium	67	33	83,000	\$40,000,000	.	.
3	Hospitals	Skagit Valley Public Hospital District N	Skagit Valley Hospital	No	2004	Hospital	Heavy	100	0	254,608	\$87,887,000	\$51,957,000	\$204
2	K-12 Schools	Aberdeen School District	Aberdeen High School	No	2004	General classroom	Medium	86	14	204,178	\$53,863,000	\$36,615,800	\$179
7	K-12 Schools	Eastmont School District	Eastmont Middle School	Yes	2003	General classroom	Medium	100	0	84,000	\$12,455,338	\$13,835,158	\$165
13	K-12 Schools	Evergreen School District	Evergreen High School	No	.	General classroom	.	.	.	.	.	.	.
92	K-12 Schools	Griffin School District #324	Elementary/Middle School	Yes	2003	General classroom	Heavy	60	40	85,000	\$12,800,000	\$10,007,192	\$118
35	K-12 Schools	Lake Washington School District	Mann Elementary School	Yes	2000	General classroom	Medium	100	0	52,358	\$11,683,439	\$9,519,365	\$182
36	K-12 Schools	Northshore School District	Bothell High School, Phase 2	No	2003	Teaching Lab	Medium	100	0	67,212	\$20,500,000	\$15,142,531	\$225
37	K-12 Schools	Northshore School District	Northshore Junior High School	Yes	2001	Teaching Lab	Medium	60	40	113,500	\$25,800,000	\$19,313,421	\$170
99	K-12 Schools	Olympia School District	New Capital High School	No	.	General classroom	.	.	.	.	.	.	.
100	K-12 Schools	Seattle School District	Cleveland High School	No	2005	Multipurpose	Medium	52.7	47.3	172,075	\$60,386,000	\$42,444,500	\$247
44	K-12 Schools	Seattle School District	Garfield High School	No	2003	General classroom	Heavy	28	72	236,000	\$78,780,000	.	.
45	K-12 Schools	Seattle School District	Nathan Hale High School	No	2002	Performing Arts	Medium	95	5	.	.	\$6,704,086	.
101	K-12 Schools	Seattle School District	Roosevelt High School	No	2002	General classroom	Medium	54	46	295,000	\$84,522,000	\$56,790,961	\$193
94	K-12 Schools	Spokane School District	Rogers High School	No	2003	General classroom	Medium	44	56	250,000	.	.	.
93	K-12 Schools	Spokane School District	Shadle Park High School	No	.	General classroom	Medium	15	85	260,000	.	.	.
49	K-12 Schools	Tacoma School District	Lincoln High School	No	2003	General classroom	Medium	28	72	246,700	\$51,700,418	\$32,877,000	\$133

Appendix C Project Information Summary - continued

2005 Survey Project Code	RCW Code	Agency	Project Name	Is project complete?	Year GC/CM Approved	Building Type	Construction Type	Percentage - New Construction	Percentage - Renovation	Total Gross Area (sq ft)	Total project cost budget	Contract Budget (MACC+Fee+GC)	Contract Cost per Sq Ft (Contract Budget/Total Gross Area)
1	K-12 Schools	Tacoma School District #10	Stadium High School Modernization and Ad	No	2000	General classroom	Medium	28.8	71.2	297,977	\$88,085,987	\$66,169,248	\$222
4	K-12 Schools	Wahluke School District	Wahluke High School	No	2003	Teaching Lab	Medium	100	0	118,674	\$20,407,512	\$15,072,430	\$127
104	Other	Pierce Transit	Pierce Transit - Maintenance Facility Up	Yes	.	Operational Support	.	.	.	.	.	.	.
105	Other	Pierce Transit	Pierce Transit - Tacoma Dome Station Par	Yes	.	Infrastructure	.	.	.	.	.	.	.
90	Other	Seattle Housing Authority	NewHolly Hope VI Redev. Ph 1	Yes	1996	Residential	Light	100	0	.	\$85,846,349	\$63,746,474	.
89	Other	Seattle Public Housing Authority	High Point Hope VI Redev. Ph 1	No	2003	Residential	Light	100	0	437,850	.	\$65,385,075	\$149
47	Other	Seattle Public Housing Authority	NewHolly Ph. 2	Yes	1999	Residential	Light	100	0	187,992	\$44,195,338	\$29,131,459	\$155
48	Other	Seattle Public Housing Authority	NewHolly Ph. 3	No	2000	Residential	Light	99.7	0.3	218,312	\$65,561,484	\$49,506,853	\$227
91	Other	Seattle Public Housing Authority	Rainer Vista Hope VI Redev. Ph 1	No	2000	Residential	Light	100	0	200,000	\$46,750,000	\$43,272,000	\$216
9	PFD	Clark County Public Facilities District	Exhibition Center	No	2004	Unclassified	Medium	100	0	112,000	\$12,540,500	\$13,412,414	\$120
102	PFD	Edmonds PFD	Center for the Arts	No	.	Performing Arts	.	.	.	.	.	.	.
87	PFD	OT Spokane PFD	Spokane Convention Center Expansion	No	2003	Unclassified	Heavy	74	26	415,028	\$79,400,000	\$48,786,776	\$118
96	PFD	Pierce County	Convention Center	No	.	Unclassified	.	.	.	.	.	.	.
103	PFD	Seattle PFD	WA Baseball Stadium SAFECO Field	Yes	1996	Stadium	.	.	.	.	\$498,350,000	\$225,649,000	.
5	PFD	Skagit Regional Public Facilities District	McIntyre Hall, Performing Arts and Conference	Yes	2002	Performing Arts	Heavy	100	0	32,353	\$17,000,000	\$12,811,000	\$396
40	Ports	Port of Seattle	C1 Baggage Facility	No	2003	Operational Support	.	32	68	265,000	\$142,203,300	\$90,359,761	\$341
39	Ports	Port of Seattle	SeaTac Parking Garage	Yes	1995	Unclassified	Heavy	90	10	1,200,000	\$60,000,000	\$53,134,836	\$44
42	Ports	Port of Seattle	Shilshole Marina Redevelopment	No	2004	Infrastructure	Heavy	80	20	12,000	\$78,500,000	\$49,775,138	\$4,148
107	Ports	Port of Seattle	World Trade Center	Yes	1997	Office	.	.	.	.	\$19,210,747	.	.
50	UW	University of Washington	Architecture Hall Renovation	No	2004	General classroom	Medium	0	100	48,115	\$25,484,000	.	.
51	UW	University of Washington	Bioengineering-Genome Sciences Bldg	No	2002	Research	Heavy	100	0	280,240	\$150,000,000	\$103,882,398	\$371
53	UW	University of Washington	Cascade Tower Renovation	Yes	1999	Hospital	Heavy	0	100	75,000	\$14,369,991	\$8,642,783	\$115
54	UW	University of Washington	Conibear Shellhouse	No	2001	Athletic	Heavy	41	59	47,285	\$16,700,000	\$11,026,988	\$233
55	UW	University of Washington	Dempsey Indoor Practice Facility	Yes	1998	Athletic	Medium	100	0	95,000	\$31,299,000	.	.
56	UW	University of Washington	EE/CSE Phase 2 Expansion	Yes	1999	General classroom	Heavy	100	0	160,000	\$71,700,000	\$44,200,000	\$276
57	UW	University of Washington	Guggenheim Hall Renovation	No	2004	General classroom	Medium	0	100	57,045	\$28,323,000	.	.
58	UW	University of Washington	Harborview Bond Program	No	2002	Hospital	Heavy	100	0	656,000	\$292,800,000	.	.
59	UW	University of Washington	Harborview Research & Training Facility	Yes	1994	Research	Medium	100	0	178,000	\$78,761,000	.	.
60	UW	University of Washington	Hec Ed Pavilion Renovation	Yes	1997	Athletic	Medium	0	100	270,000	\$44,508,000	\$27,693,189	\$103
61	UW	University of Washington	IMA Expansion	Yes	1998	Athletic	Heavy	100	0	40,000	\$43,300,000	\$23,159,937	\$579
62	UW	University of Washington	Johnson Hall Renovation	No	2002	Multipurpose	Heavy	0	100	121,500	\$55,290,000	\$32,235,835	\$265
63	UW	University of Washington	Law School Building	Yes	1999	General classroom	Heavy	100	0	196,000	\$74,386,500	\$51,820,994	\$264
64	UW	University of Washington	Oceanography Research & Training	Yes	1996	Teaching Lab	Medium	100	0	241,537	\$80,780,000	.	.
65	UW	University of Washington	Pacific Tower	Yes	1998	Hospital	Heavy	0	100	700,000	\$34,954,000	\$22,117,835	\$32
66	UW	University of Washington	Surgery Pavilion	Yes	1999	Hospital	Heavy	100	0	180,000	\$87,500,000	\$63,562,453	\$353
67	UW	University of Washington	Suzzallo Library Renovation	Yes	1999	Student Services	Medium	0	100	318,000	\$47,257,000	\$20,300,000	\$64
68	UW	University of Washington	Tacoma Branch Campus Phase 1A	Yes	1995	General classroom	.	.	.	.	\$33,887,012	\$21,899,216	.
70	UW	University of Washington	Tacoma Branch Campus Phase 2B	Yes	2001	Operational Support	Medium	0	100	133,000	\$44,349,000	\$25,999,648	\$195
73	WSU	Washington State University	Biotechnology/ Life Sciences Facility (R	No	2004	Research	Heavy	100	0	128,000	\$61,930,388	.	.
74	WSU	Washington State University	ELSB Vancouver	Yes	1997	Research	Heavy	100	0	60,000	\$29,900,000	\$17,004,195	\$283
75	WSU	Washington State University	Energy Plan (Steam Plant Redevelopment)	Yes	2002	Operational Support	Light	100	0	26,000	\$41,000,000	\$17,999,141	\$692
76	WSU	Washington State University	Johnson Hall - Plant Biosciences Complex	No	2001	Research	Heavy	100	0	92,380	\$39,000,000	\$26,201,762	\$284
78	WSU	Washington State University	Scholars Hall	Yes	1999	Multipurpose	Heavy	0	100	57,700	\$15,300,000	\$9,699,663	\$168
77	WSU	Washington State University	School of Communication Addition (Murrow	Yes	2002	Teaching Lab	Heavy	100	0	26,000	\$12,665,000	\$7,287,151	\$280
79	WSU	Washington State University	Spokane Academic Center	No	2001	General classroom	Heavy	100	0	106,000	\$33,850,000	\$19,642,735	\$185
80	WSU	Washington State University	Spokane Health Sciences Bldg	Yes	1997	Teaching Lab	Heavy	100	0	145,000	\$39,061,222	\$25,860,906	\$178
81	WSU	Washington State University	Spokane Nursing Center	No	2003	Teaching Lab	Heavy	100	0	85,000	\$34,600,000	.	.
108	WSU	Washington State University	Student Recreation Center	Yes	.	Athletic	.	.	.	.	.	.	.
82	WSU	Washington State University	Teaching and Learning Center	Yes	1997	Multipurpose	Heavy	100	0	95,000	\$41,572,435	\$25,568,663	\$269
85	WSU	Washington State University	Tri-Cities Bio-Products Facility	No	2004	Teaching Lab	Heavy	100	0	57,000	.	.	.
83	WSU	Washington State University	Vancouver Multi-media Classroom Bldg	Yes	1997	Teaching Lab	Heavy	100	0	49,200	\$17,500,000	\$11,121,514	\$226
84	WSU	Washington State University	Vancouver Student Services	No	2002	Student Services	Heavy	100	0	20,300	\$12,350,000	.	.
Response Count	108	108	108	108	94	108	90	89	89	86	90	74	66
				Yes Count	56						Total Value of Projects	\$5,860,270,787	\$2,901,670,374
				No Count	52						\$65,114,120		

Appendix D Schedule Summary

2005 Survey Code	RCW Code	Agency Code	Project Name	Overall project planned		Overall project actual		Design planned		Design actual		Construction planned		Construction actual		Substantial completion		Final acceptance	
				Start	Finish	Start	Finish	Start	Finish	Start	Finish	Start	Finish	Start	Finish	Start	Finish	Start	Finish
6	Cities	Bellevue	New City Building Redevelopment	3/25/2002	12/11/2005	3/25/2002	.	2/3/2003	11/1/2005	2/3/2003	.	9/1/2004	11/11/2005	9/1/2004	.	11/11/2005	.	12/11/2005	.
12	Cities	Everett	Water Pollution Control Facility Phase A	9/1/2003	.	9/1/2003	.	9/1/2003	12/31/2004	9/1/2003	2/10/2005	2/15/2005	.	.	.	.	.	.	.
88	Cities	Seattle	Aquarium, Pier 59 Renovations	10/23/2003	3/30/2004	10/23/2003	3/30/2004	3/31/2004	3/28/2005	3/31/2004	.	3/29/2005	5/31/2006	.	.	5/26/2006	.	8/16/2006	.
41	Cities	Seattle	City Fire Station #10	4/1/2004	9/1/2007	4/1/2004	.	4/1/2004	3/1/2006	4/1/2004	.	11/1/2005	7/1/2007	.	.	.	.	.	.
31	Cities	Seattle	City Justice Center	5/1/1999	8/1/2002	5/1/1999	11/1/2002	5/1/1999	8/1/2000	5/1/1999	8/1/2000	4/1/2000	8/1/2002	4/1/2000	8/1/2002	8/1/2002	11/1/2002	11/1/2002	11/1/2002
11	Cities	Seattle	Landsburg Fish Passage & Diversion Facility	1/3/2000	3/1/2004	1/3/2000	3/1/2004	4/25/2001	4/16/2002	4/25/2001	4/16/2002	5/21/2002	3/1/2004	5/21/2002	3/1/2004	8/27/2003	9/1/2003	3/1/2004	3/1/2004
43	Cities	Seattle	McCaw Hall	11/1/1999	3/1/2004	11/1/1999	12/13/2004	1/1/2000	6/30/2001	3/21/2000	7/27/2001	5/1/2001	9/2/2003	5/14/2001	11/30/2003	6/10/2003	6/22/2003	.	12/13/2004
109	Cities	Seattle	Park 90-5	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
95	Cities	Seattle	Police West Precinct Station and Community	.	9/1/1999	.	9/1/1999	.	.	.	.	.	.	12/1/1997	8/31/1999	12/30/1998	6/30/1999	2/1/1999	9/1/1999
32	Cities	Seattle	Seattle Central Library	6/15/1999	7/1/2003	6/15/1999	5/21/2004	6/15/1999	10/1/2001	6/15/1999	6/15/2002	8/1/2001	7/1/2003	9/6/2001	5/1/2004	5/1/2003	3/11/2004	7/1/2003	10/15/2004
30	Cities	Seattle	Seattle City Hall	8/1/1999	4/1/2003	8/1/1999	8/1/2003	8/1/1999	6/1/2002	8/1/1999	9/1/2002	2/1/2001	4/1/2003	2/1/2001	6/1/2003	4/1/2003	4/1/2003	7/1/2003	8/1/2003
111	Cities	Seattle Public Utilities	Cedar River Sockeye Hatchery Project	6/1/2002	10/1/2005	.	.	6/1/2002	12/1/2003	.	.	1/1/2004	10/1/2005	.	.	.	.	.	.
29	City PDA	Seattle-Chinatown International District	International District Village Square Ph	10/1/1999	9/30/2004	10/1/1999	8/15/2004	11/15/1999	12/15/2002	11/15/1999	12/23/2002	11/1/2002	8/30/2004	11/15/2002	7/30/2004	8/30/2004	7/25/2004	9/25/2004	8/30/2004
33	Counties	King County	King County Courthouse	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
34	Counties	King County	King County Jail	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
28	Counties	King County, Department of Natural Resource	Brightwater Treatment Facility	1/1/1999	7/30/2010	1/1/1999	12/31/2011	11/25/2002	5/1/2006	11/25/2002	.	5/1/2006	10/30/2010	.	.	12/31/2010	.	12/31/2011	.
38	Counties	Pierce County	Adult Detention Facility Construction an	5/15/1997	9/17/2002	5/15/1997	2/17/2004	5/15/1997	10/22/1999	5/15/1997	8/1/2000	12/27/1999	8/17/2002	5/30/2000	2/17/2004	8/17/2002	2/17/2004	9/17/2002	.
97	Counties	Snohomish County	Denney Juvenile Justice Center	.	.	.	.	.	.	.	.	.	.	.	.	8/25/1998	9/3/1998	12/15/1998	12/15/1998
98	Counties	Snohomish County	Snohomish County City Redevelopment	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
71	Ferries	Washington State Ferries	Anacortes Terminal Relocation	7/1/2003	6/30/2008	7/1/2003	.	2/11/2004	10/31/2006	2/11/2004	.	3/1/2006	6/30/2008	.	.	3/1/2008	.	6/30/2008	.
27	GA	GA	WA Sate Legislative Building Rehabilitation	10/1/1997	6/30/2005	10/1/1997	.	6/1/2000	1/31/2002	8/24/2000	1/31/2002	6/1/2002	10/31/2004	6/3/2002	11/12/2004	10/31/2004	11/12/2004	3/31/2005	.
15	GA	GA/Cascadia CC	UW-CCC Bothel Branch Campus Phase I & II	7/15/1997	12/30/2002	7/15/1997	11/6/2002	9/25/1997	7/14/1998	9/25/1997	7/14/1998	7/15/1998	9/15/2002	7/15/1998	6/30/2002	9/30/2002	6/30/2002	12/30/2002	11/6/2002
26	GA	GA/Department of Veterans Affairs	WA State Veterans Home	2/1/2002	12/31/2004	2/1/2002	3/1/2005	5/30/2002	2/10/2003	5/30/2002	4/30/2003	6/1/2003	11/15/2004	4/1/2003	.	10/15/2004	1/13/2005	12/31/2004	.
106	GA	GA/DOC	Airway Heights Corrections Center	7/1/1989	6/1/1995	8/1/1989	6/1/1993	9/1/1989	9/1/1992	4/1/1990	1/1/1992	9/1/1991	6/1/1993	9/1/1991	6/1/1993	.	6/1/1993	.	2/1/1994
10	GA	GA/DOC	Larch & Cedar Creek Corrections Centers	7/1/1995	.	10/6/1995	.	7/1/1995	.	10/6/1995	.	.	.	.	.	.	.	6/30/1999	5/30/1998
16	GA	GA/DOC	Monroe Close Custody Conversion & Repair	8/1/1997	2/2/1999	8/1/1997	7/1/1999	8/1/1997	1/1/1998	8/1/1997	3/15/1998	2/1/1998	2/1/1999	5/15/1998	7/1/1999	11/1/1998	6/1/1999	4/1/1999	3/13/2000
17	GA	GA/DOC	Special Offender Unit--Expand to 400 bed	10/1/1995	1/1/2001	10/1/1995	2/1/2002	3/1/1998	5/1/1999	3/1/1998	6/1/1999	7/1/1999	2/1/2001	7/1/1999	11/1/2001	11/1/2001	11/1/2001	1/1/2002	2/1/2002
18	GA	GA/DOC	Stafford Creek Corrections Center, Phase	9/19/1996	2/1/2001	9/19/1996	4/1/2001	9/19/1996	9/19/1997	9/19/1996	5/4/1998	3/1/1997	1/1/2000	7/1/1998	4/1/2001	1/1/2000	2/1/2001	3/1/2000	4/1/2001
20	GA	GA/DOC	Washington State Reformatory - 400 Bed A	4/1/1994	7/1/1997	7/1/1994	11/1/1997	7/13/1995	5/1/1996	9/29/1995	6/1/1996	7/1/1996	4/1/1997	6/25/1996	7/27/1997	2/1/1997	5/17/1997	6/1/1967	10/27/1997
8	GA	GA/DOC	WCC 97-99 Correctional Industries & Mast	9/1/1997	6/30/1999	7/1/1997	8/21/2002	9/1/1997	3/1/1998	7/31/1997	7/29/1998	3/30/1998	6/1/1999	10/13/1997	8/10/2000	5/1/1999	10/26/1999	6/1/1999	8/21/2002
72	GA	GA/DOC	WCCW Mental Health & Recep.	9/1/1998	2/1/2001	11/1/1998	2/1/2002	9/1/1998	5/1/1999	8/1/1999	4/1/2000	7/1/1999	2/1/2001	4/1/2000	2/1/2002	12/1/2000	1/1/2002	2/1/2001	2/1/2002
19	GA	GA/DOC	WCCW Replace G Units with 256 Bed Housing	7/1/1995	6/30/1997	7/18/1995	1/9/1998	7/1/1995	6/30/1997	7/18/1995	7/4/1997	7/1/1995	6/30/1997	7/18/1995	8/29/1997	6/30/1997	8/29/1997	6/30/1997	1/9/1998
22	GA	GA/Everett CC	Glacier/Pilchuck & Monte Cristo - Arts &	1/1/2001	9/1/2006	1/1/2001	.	7/1/2003	4/1/2005	7/15/2003	.	7/1/2005	9/1/2006	.	.	9/1/2006	.	11/1/2006	.
23	GA	GA/Everett CC	Undergraduate Education Center	9/1/2003	8/30/2008	9/1/2003	.	7/1/2005	6/1/2006	.	.	7/1/2007	8/30/2008	.	.	8/30/2008	.	11/1/2008	.
24	GA	GA/Highline CC	HCC/CWU Higher Education Center	6/6/2001	4/1/2005	6/6/2001	2/28/2005	2/1/2002	3/1/2003	2/12/2002	5/12/2003	8/15/2003	12/15/2004	9/15/2003	11/16/2004	12/15/2004	11/16/2004	4/1/2005	2/28/2005
25	GA	GA/South Puget Sound	Science Complex Addition	7/1/2003	.	.	.	7/1/2005	4/14/2006	.	.	7/1/2007	.	.	.	.	.	.	.
86	GA	GA-BCC	Robinswood School Replacement (Bldg R)	.	.	1/1/1999	12/20/2002	.	.	4/13/1999	9/30/2000	.	.	1/15/2000	12/31/2001	.	12/31/2001	.	12/20/2002
110	GA	GA-DOC	Washington Corrections Center for Women	.	.	.	.	.	.	.	.	.	.	.	.	2/1/1993	6/30/1993	.	1/25/1994
21	GA	GA-DSHS	Special Commitment Center Construction	10															

Appendix D Schedule Summary - continued

2005 Survey Code	RCW Code	Agency Code	Project Name	Schedule Planned - Design Start to Construction Finished (days)	Schedule Actual - Design Start to Construction Finished (days)	Schedule Planned- Scheduled Actual (DS to CF)	Construction Schedule Planned (days)	Construction Schedule Actual (days)	Construction Schedule Planned - Actual	Was project completed on time?
6	Cities	Bellevue	New City Building Redevelopment	1012	.	.	436	.	.	No
12	Cities	Everett	Water Pollution Control Facility Phase A	.	.	.	.	.	.	Not Completed
88	Cities	Seattle	Aquarium, Pier 59 Renovations	791	.	.	428	.	.	Not Completed
41	Cities	Seattle	City Fire Station #10	1186	.	.	607	.	.	Not Completed
31	Cities	Seattle	City Justice Center	1188	1188	0	852	852	0	Yes
11	Cities	Seattle	Landsburg Fish Passage & Diversion Facility	1041	1041	0	650	650	0	Yes
43	Cities	Seattle	McCaw Hall	1340	1349	-9	854	930	-76	Yes
109	Cities	Seattle	Park 90-5	.	.	.	.	.	.	.
95	Cities	Seattle	Police West Precinct Station and Community	.	.	.	.	638	.	.
32	Cities	Seattle	Seattle Central Library	1477	1782	-305	699	968	-269	No
30	Cities	Seattle	Seattle City Hall	1339	1400	-61	789	850	-61	Yes
111	Cities	Seattle Public Utilities	Cedar River Sockeye Hatchery Project	1218	.	.	639	.	.	.
29	City PDA	Seattle-Chinatown International District	International District Village Square Ph	1750	1719	31	668	623	45	Yes
33	Counties	King County	King County Courthouse	.	.	.	.	.	.	.
34	Counties	King County	King County Jail	.	.	.	.	.	.	.
28	Counties	King County, Department of Natural Resource	Brightwater Treatment Facility	2896	.	.	1643	.	.	Not Completed
38	Counties	Pierce County	Adult Detention Facility Construction an	1920	2469	-549	964	1358	-394	No
97	Counties	Snohomish County	Denney Juvenile Justice Center	.	.	.	.	.	.	.
98	Counties	Snohomish County	Snohomish County City Redevelopment	.	.	.	.	.	.	.
71	Ferries	Washington State Ferries	Anacortes Terminal Relocation	1601	.	.	852	.	.	Not Completed
27	GA	GA	WA Sate Legislative Building Rehabilitation	1613	1541	72	883	893	-10	Not Completed
15	GA	GA/Cascadia CC	UW-CCC Bothel Branch Campus Phase I & II	1816	1739	77	1523	1446	77	Yes
26	GA	GA/Department of Veterans Affairs	WA State Veterans Home	900	.	.	533	.	.	No
106	GA	GA/DOC	Airway Heights Corrections Center	1369	1157	212	639	639	0	Yes
10	GA	GA/DOC	Larch & Cedar Creek Corrections Centers	.	.	.	.	.	.	Yes
16	GA	GA/DOC	Monroe Close Custody Conversion & Repair	549	699	-150	365	412	-47	No
17	GA	GA/DOC	Special Offender Unit--Expand to 400 bed	1068	1341	-273	581	854	-273	Yes
18	GA	GA/DOC	Stafford Creek Corrections Center, Phase	1199	1655	-456	1036	1005	31	No
20	GA	GA/DOC	Washington State Reformatory - 400 Bed A	628	667	-39	274	397	-123	Yes
8	GA	GA/DOC	WCC 97-99 Correctional Industries & Mast	638	1106	-468	428	1032	-604	No
72	GA	GA/DOC	WCCW Mental Health & Recep.	884	915	-31	581	671	-90	No
19	GA	GA/DOC	WCCW Replace G Units with 256 Bed Housing	730	773	-43	730	773	-43	No
22	GA	GA/Everett CC	Glacier/Pilchuck & Monte Cristo - Arts &	1158	.	.	427	.	.	Not Completed
23	GA	GA/Everett CC	Undergraduate Education Center	1156	.	.	426	.	.	Not Completed
24	GA	GA/Highline CC	HCC/CWU Higher Education Center	1048	1008	40	488	428	60	Yes
25	GA	GA/South Puget Sound	Science Complex Addition	.	.	.	.	.	.	Not Completed
86	GA	GA-BCC	Robinswood School Replacement (Bldg R)	.	993	.	.	716	.	Yes
110	GA	GA-DOC	Washington Corrections Center for Women	.	.	.	.	.	.	Yes
21	GA	GA-DSHS	Special Commitment Center Construction	1239	1481	-242	761	996	-235	No
46	Hospitals	Skagit Valley Public Hospital District #	Island Hospital	1278	.	.	731	.	.	Not Completed
3	Hospitals	Skagit Valley Public Hospital District N	Skagit Valley Hospital	1398	.	.	943	.	.	Not Completed
2	K-12 Schools	Aberdeen School District	Aberdeen High School	1248	.	.	823	.	.	Not Completed
7	K-12 Schools	Eastmont School District	Eastmont Middle School	777	829	-52	378	504	-126	Yes
13	K-12 Schools	Evergreen School District	Evergreen High School	.	.	.	.	.	.	Not Completed
92	K-12 Schools	Griffin School District #324	Elementary/Middle School	909	909	0	336	336	0	Yes
35	K-12 Schools	Lake Washington School District	Mann Elementary School	1123	973	150	464	441	23	No
36	K-12 Schools	Northshore School District	Bothell High School, Phase 2	898	.	.	420	.	.	Not Completed
37	K-12 Schools	Northshore School District	Northshore Junior High School	1374	1364	10	639	548	91	No
99	K-12 Schools	Olympia School District	New Capital High School	.	.	.	.	.	.	Not Completed
100	K-12 Schools	Seattle School District	Cleveland High School	1647	.	.	808	.	.	Not Completed
44	K-12 Schools	Seattle School District	Garfield High School	1892	.	.	805	.	.	Not Completed
45	K-12 Schools	Seattle School District	Nathan Hale High School	1034	.	.	395	.	.	Not Completed
101	K-12 Schools	Seattle School District	Roosevelt High School	1657	.	.	764	.	.	Not Completed
94	K-12 Schools	Spokane School District	Rogers High School	1583	.	.	929	.	.	Not Completed
93	K-12 Schools	Spokane School District	Shadle Park High School	1583	.	.	929	.	.	Not Completed
49	K-12 Schools	Tacoma School District	Lincoln High School	1613	.	.	448	.	.	Not Completed
1	K-12 Schools	Tacoma School District #10	Stadium High School Modernization and Ad	1947	.	.	767	.	.	Not Completed
4	K-12 Schools	Wahluke School District	Wahluke High School	1115	.	.	555	.	.	Not Completed
104	Other	Pierce Transit	Pierce Transit - Maintenance Facility Up	.	.	.	.	.	.	.
105	Other	Pierce Transit	Pierce Transit - Tacoma Dome Station Par	.	.	.	.	.	.	.
90	Other	Seattle Housing Authority	NewHolly Hope VI Redev. Ph 1	2098	2098	0	1643	1643	0	Yes
89	Other	Seattle Public Housing Authority	High Point Hope VI Redev. Ph 1	865	.	.	741	.	.	Not Completed
47	Other	Seattle Public Housing Authority	NewHolly Ph. 2	1539	1539	0	1135	1135	0	Yes
48	Other	Seattle Public Housing Authority	NewHolly Ph. 3	1816	.	.	727	.	.	Yes
91	Other	Seattle Public Housing Authority	Rainer Vista Hope VI Redev. Ph 1	1996	.	.	884	.	.	Not Completed
9	PFD	Clark County Public Facilities District	Exhibition Center	453	.	.	378	.	.	Yes
102	PFD	Edmonds PFD	Center for the Arts	.	.	.	.	.	.	Not Completed
87	PFD	OT Spokane PFD	Spokane Convention Center Expansion	1157	.	.	761	.	.	Not Completed
96	PFD	Pierce County	Convention Center	.	.	.	.	.	.	Not Completed
103	PFD	Seattle PFD	WA Baseball Stadium SAFECO Field	.	.	.	.	.	.	.
5	PFD	Skagit Regional Public Facilities District	McIntyre Hall, Performing Arts and Conference	.	.	.	.	.	.	Yes

Appendix D Schedule Summary - continued

2005 Survey Code	RCW Code	Agency Code	Project Name	Overall project planned		Overall project actual		Design planned		Design actual		Construction planned		Construction actual		Substantial completion		Final acceptance	
				Start	Finish	Start	Finish	Start	Finish	Start	Finish	Start	Finish	Start	Finish	Start	Finish	Start	Finish
40	Ports	Port of Seattle	C1 Baggage Facility	6/1/2003	3/27/2007	6/1/2003	.	6/1/2003	12/6/2004	6/1/2003	12/6/2004	6/1/2004	.	6/1/2004	.	.	.	.	.
39	Ports	Port of Seattle	SeaTac Parking Garage	.	.	.	.	12/1/1996	3/30/1998	12/1/1996	3/30/1998	7/15/1998	8/17/2000	3/13/1998	11/17/2000	8/17/2000	11/17/2000	.	.
42	Ports	Port of Seattle	Shilshole Marina Redevelopment	.	12/31/2008	.	.	5/1/2000	12/30/2004	5/1/2000	3/15/2005	11/15/2004	.	2/17/2005	.	10/15/2008	.	.	.
107	Ports	Port of Seattle	World Trade Center	.	.	9/1/1997	5/1/1999	.	.	.	.	.	.	.	.	.	.	.	.
50	UW	University of Washington	Architecture Hall Renovation	11/12/2003	9/27/2007	11/12/2003	.	11/13/2003	1/13/2006	11/13/2003	.	4/4/2006	7/18/2007	.	.	7/18/2007	.	1/18/2008	.
51	UW	University of Washington	Bioengineering-Genome Sciences Bldg	12/4/2000	2/7/2006	12/4/2000	.	5/1/2002	10/7/2003	4/15/2002	.	9/15/2003	11/2/2005	10/7/2003	.	7/1/2005	.	2/1/2006	.
53	UW	University of Washington	Cascade Tower Renovation	10/1/1997	6/3/2000	10/1/1997	6/3/2000	6/1/1998	3/12/1999	6/1/1998	3/12/1999	5/17/1999	6/3/2000	5/17/1999	6/3/2000	6/30/2000	5/12/2000	12/30/2000	12/4/2000
54	UW	University of Washington	Conibear Shellhouse	1/1/2001	6/15/2005	1/1/2001	.	7/19/2001	11/19/2003	7/19/2001	10/31/2003	12/12/2003	2/14/2005	1/13/2004	.	2/14/2005	.	4/14/2005	.
55	UW	University of Washington	Dempsey Indoor Practice Facility	1/15/1998	7/15/2002	1/15/1998	9/22/2002	4/30/1998	1/1/2000	4/30/1998	7/1/2000	7/1/2000	8/20/2001	7/15/2000	11/15/2001	9/1/2002	8/20/2001	.	9/11/2002
56	UW	University of Washington	EE/CSE Phase 2 Expansion	1/15/1999	6/30/2003	1/15/1999	5/18/2003	7/16/1999	9/15/1999	7/16/1999	2/19/2001	1/15/2001	6/30/2003	3/15/2001	5/18/2003	6/30/2003	8/19/2003	12/30/2003	.
57	UW	University of Washington	Guggenheim Hall Renovation	11/12/2003	6/10/2008	11/12/2003	.	4/30/2004	12/9/2005	7/26/2004	.	4/7/2006	7/31/2007	.	.	7/31/2007	.	1/31/2008	.
58	UW	University of Washington	Harborview Bond Program	2/1/2002	5/1/2008	2/1/2002	.	9/1/2003	1/1/2005	9/1/2003	.	2/1/2005	8/1/2008	.	.	8/1/2008	.	8/1/2009	.
59	UW	University of Washington	Harborview Research & Training Facility	7/10/1994	12/31/1998	7/10/1994	12/31/1998	8/12/1994	6/30/1996	8/12/1994	11/21/1996	7/1/1996	12/31/1998	12/16/1996	6/17/1999	12/31/1998	6/17/1999	3/31/1998	10/19/2000
60	UW	University of Washington	Hec Ed Pavilion Renovation	1/1/1994	7/30/2002	1/1/1994	7/30/2002	10/1/1997	7/30/1999	10/1/1997	7/30/1999	4/1/1999	11/30/2000	9/27/1999	5/2/2002	11/30/2000	12/1/2000	5/30/2001	5/2/2002
61	UW	University of Washington	IMA Expansion	9/15/1995	12/31/2003	9/15/1995	12/31/2003	1/1/2000	6/15/2001	1/1/2000	9/15/2001	7/3/2001	6/1/2003	7/3/2001	11/30/2003	9/29/2003	9/29/2003	.	.
62	UW	University of Washington	Johnson Hall Renovation	7/1/2002	12/19/2005	7/1/2002	.	12/5/2002	6/1/2004	12/5/2002	1/3/2005	2/1/2004	8/1/2005	3/25/2004	.	12/19/2005	.	6/19/2006	.
63	UW	University of Washington	Law School Building	5/1/1996	8/11/2003	5/1/1996	8/11/2003	5/1/1996	1/14/2002	5/1/1996	1/14/2002	7/30/2001	5/30/2003	7/30/2001	7/18/2003	8/11/2003	8/11/2003	2/11/2004	10/15/2004
64	UW	University of Washington	Oceanography Research & Training	7/1/1995	7/1/1999	7/1/1995	6/8/2000	7/1/1997	6/30/1999	7/7/1995	6/30/1997	7/14/1997	7/1/1999	7/14/1997	6/8/2000	7/1/1999	6/10/1999	.	6/8/2000
65	UW	University of Washington	Pacific Tower	1/15/1998	9/30/2001	1/15/1998	9/30/2002	1/15/1998	6/28/1999	1/15/1998	6/28/1999	9/1/1999	11/30/2001	9/1/1999	10/31/2001	11/30/2001	10/31/2001	5/30/2001	6/12/2003
66	UW	University of Washington	Surgery Pavilion	2/15/2000	12/12/2003	2/15/2000	8/4/2004	2/25/2000	6/1/2002	2/25/2000	6/1/2001	4/23/2001	6/28/2003	4/23/2001	8/11/2003	6/12/2003	9/12/2003	9/12/2003	8/4/2004
67	UW	University of Washington	Suzzallo Library Renovation	9/15/1994	12/27/2002	9/14/1994	8/5/2004	9/15/1994	1/15/1999	9/14/1994	4/15/2000	6/27/2000	6/27/2002	8/10/2000	8/1/2002	6/27/2002	8/1/2002	12/27/2002	12/12/2002
68	UW	University of Washington	Tacoma Branch Campus Phase 1A	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
70	UW	University of Washington	Tacoma Branch Campus Phase 2B	3/15/1998	4/30/2004	3/15/1998	.	9/1/1998	12/31/2001	9/1/1998	12/30/2002	6/1/2002	9/15/2003	8/1/2002	12/3/2003	9/15/2003	12/3/2003	8/31/2005	.
73	WSU	Washington State University	Biotechnology/ Life Sciences Facility (R	5/1/2002	3/15/2008	5/1/2002	.	5/1/2002	8/31/2005	5/1/2002	.	3/15/2006	2/1/2008	.	.	1/1/2008	.	3/15/2008	.
74	WSU	Washington State University	ELSB Vancouver	1/1/1996	7/1/2001	10/1/1993	2/1/1999	7/1/1997	10/1/1999	.	.	10/1/1999	7/1/2001	.	.	.	.	.	.
75	WSU	Washington State University	Energy Plan (Steam Plant Redevelopment)	11/1/2002	6/1/2004	11/1/2002	.	11/1/2002	3/15/2004	11/1/2002	3/15/2004	4/1/2003	10/31/2003	4/1/2003	10/31/2003	10/31/2003	10/31/2003	6/1/2004	.
76	WSU	Washington State University	Johnson Hall - Plant Biosciences Complex	10/1/1999	8/15/2005	10/1/1999	.	12/13/2001	5/7/2002	12/13/2001	5/7/2002	7/1/2003	4/28/2005	7/1/2003	.	4/28/2005	.	8/15/2005	.
78	WSU	Washington State University	Scholars Hall	11/1/1997	4/30/1998	11/1/1997	4/30/1998	1/1/1999	2/28/2000	1/1/1999	2/28/2000	6/1/2000	7/27/2001	6/1/2000	7/27/2001	7/27/2001	7/27/2001	8/15/2001	8/15/2001
77	WSU	Washington State University	School of Communication Addition (Morrow	9/1/2000	1/1/2004	9/1/2000	1/1/2004	9/1/2000	6/1/2002	9/1/2000	6/1/2002	10/8/2002	11/3/2003	10/8/2002	11/3/2003	11/3/2003	11/3/2003	1/1/2004	1/1/2004
79	WSU	Washington State University	Spokane Academic Center	10/1/1999	8/1/2006	10/1/1999	.	1/1/2002	6/1/2003	1/1/2002	6/1/2003	6/1/2004	6/1/2006	6/1/2004	.	6/1/2006	.	8/1/2006	.
80	WSU	Washington State University	Spokane Health Sciences Bldg	7/1/1997	6/1/2002	7/1/1997	6/1/2002	7/1/1997	8/1/1999	7/1/1997	8/1/1999	9/1/1999	8/1/2001	9/1/1999	9/1/2001	8/1/2001	9/1/2001	1/1/2002	1/1/2002
81	WSU	Washington State University	Spokane Nursing Center	10/1/2003	12/1/2007	10/1/2003	.	4/1/2004	10/1/2005	4/1/2004	.	10/1/2005	10/1/2007	.	.	10/1/2007	.	10/1/2007	.
108	WSU	Washington State University	Student Recreation Center	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
82	WSU	Washington State University	Teaching and Learning Center	7/1/1995	10/1/2001	7/1/1995	1/1/2002	7/1/1997	6/1/1999	7/1/1997	5/1/1999	7/1/1999	8/1/2001	7/1/1999	10/1/2001	11/1/2001	10/1/2001	1/1/2002	1/1/2002
85	WSU	Washington State University	Tri-Cities Bio-Products Facility	10/1/2003	3/5/2004	10/1/2003	.	3/15/2004	10/1/2005	3/15/2004	.	2/15/2006	6/1/2007	.	.	6/1/2007	.	9/1/2007	.
83	WSU	Washington State University	Vancouver Multi-media Classroom Bldg	1/1/1996	1/1/2003	1/1/1996	1/1/2003	7/1/1997	3/1/2001	7/1/1997	3/1/2001	6/1/2001	1/1/2003	6/1/2001	1/1/2003	9/1/2002	9/1/2002	12/1/2002	12/1/2002
84	WSU	Washington State University	Vancouver Student Services	7/3/2003	11/30/2004	7/3/2003	.	2/1/2004	11/3/2004	2/1/2004	.	3/1/2006	3/1/2007	.	.	3/1/2007	.	6/30/2007	.

108 108 108 108 85 85 84 47 89 87 84 60 88 84 64 46 82 51 75 42

Appendix D Schedule Summary - continued

2005 Survey Code	RCW Code	Agency Code	Project Name	Schedule Plannned - Design Start to Construction Finished (days)	Schedule Actual - Design Start to Construction Finished (days)	Schedule Planned- Scheduled Actual (DS to CF)	Construction Schedule Plannned (days)	Construction Schedule Actual (days)	Construction Schedule Planned - Actual	Was project completed on time?
40	Ports	Port of Seattle	C1 Baggage Facility	.	.	.	.	.	.	Not Completed
39	Ports	Port of Seattle	SeaTac Parking Garage	1355	1447	-92	764	980	-216	Yes
42	Ports	Port of Seattle	Shilshole Marina Redevelopment	.	.	.	.	.	.	Not Completed
107	Ports	Port of Seattle	World Trade Center	.	.	.	.	.	.	.
50	UW	University of Washington	Architecture Hall Renovation	1343	.	.	470	.	.	Not Completed
51	UW	University of Washington	Bioengineering-Genome Sciences Bldg	1281	.	.	779	.	.	Not Completed
53	UW	University of Washington	Cascade Tower Renovation	733	733	0	383	383	0	Yes
54	UW	University of Washington	Conibear Shellhouse	1306	.	.	430	.	.	Not Completed
55	UW	University of Washington	Dempsey Indoor Practice Facility	1208	1295	-87	415	488	-73	Yes
56	UW	University of Washington	EE/CSE Phase 2 Expansion	1445	1402	43	896	794	102	Yes
57	UW	University of Washington	Guggenheim Hall Renovation	1187	.	.	480	.	.	Not Completed
58	UW	University of Washington	Harborview Bond Program	1796	.	.	1277	.	.	Not Completed
59	UW	University of Washington	Harborview Research & Training Facility	1602	1770	-168	913	913	0	No
60	UW	University of Washington	Hec Ed Pavilion Renovation	1156	1674	-518	609	948	-339	Yes
61	UW	University of Washington	IMA Expansion	1247	1429	-182	698	880	-182	Yes
62	UW	University of Washington	Johnson Hall Renovation	970	.	.	547	.	.	Not Completed
63	UW	University of Washington	Law School Building	2585	2634	-49	669	718	-49	Yes
64	UW	University of Washington	Oceanography Research & Training	730	1798	-1068	717	1060	-343	Yes
65	UW	University of Washington	Pacific Tower	1415	1385	30	821	791	30	Yes
66	UW	University of Washington	Surgery Pavilion	1219	1263	-44	796	840	-44	No
67	UW	University of Washington	Suzzallo Library Renovation	2842	2878	-36	730	721	9	Yes
68	UW	University of Washington	Tacoma Branch Campus Phase 1A	.	.	.	.	.	.	.
70	UW	University of Washington	Tacoma Branch Campus Phase 2B	1840	1919	-79	471	489	-18	Yes
73	WSU	Washington State University	Biotechnology/ Life Sciences Facility (R	2102	.	.	688	.	.	Not Completed
74	WSU	Washington State University	ELSB Vancouver	1461	.	.	639	.	.	.
75	WSU	Washington State University	Energy Plan (Steam Plant Redevelopment)	364	364	0	213	213	0	No
76	WSU	Washington State University	Johnson Hall - Plant Biosciences Complex	1232	.	.	667	.	.	Not Completed
78	WSU	Washington State University	Scholars Hall	938	938	0	421	421	0	Yes
77	WSU	Washington State University	School of Communication Addition (Murrow	1158	1158	0	391	391	0	Yes
79	WSU	Washington State University	Spokane Academic Center	1612	.	.	730	.	.	Not Completed
80	WSU	Washington State University	Spokane Health Sciences Bldg	1492	1523	-31	700	731	-31	Yes
81	WSU	Washington State University	Spokane Nursing Center	1278	.	.	730	.	.	Not Completed
108	WSU	Washington State University	Student Recreation Center	.	.	.	.	.	.	.
82	WSU	Washington State University	Teaching and Learning Center	1492	1553	-61	762	823	-61	Yes
85	WSU	Washington State University	Tri-Cities Bio-Products Facility	1173	.	.	471	.	.	Not Completed
83	WSU	Washington State University	Vancouver Multi-media Classroom Bldg	2010	2010	0	579	579	0	Yes
84	WSU	Washington State University	Vancouver Student Services	1124	.	.	365	.	.	Not Completed
108	108	108	108	84	45	44	84	46	44	94

Appendix E Project Cost Summary

2005 Survey Code	RCW Code	Agency	Project Name	Total project cost budget	Total project cost actual	Total project cost budget - actual	Total mgt cost budget	Total mgt cost actual	Total design cost budget	Total design cost actual	Total construction cost budget	Total construction cost actual	Was the project completed within budget?
6	Cities	Bellevue	New City Building Redevelopment	\$101,550,000	.	.	\$1,880,000	.	\$7,300,000	.	\$61,467,757	.	No
12	Cities	Everett	Water Pollution Control Facility Phase A	\$25,000,000	.	.	\$1,000,000	.	\$2,000,000	\$2,000,000	\$22,000,000	.	Not Completed
88	Cities	Seattle	Aquarium, Pier 59 Renovations	\$24,041,000	.	.	\$247,667	.	\$3,040,707	.	\$20,752,626	.	Not Completed
41	Cities	Seattle	City Fire Station #10	\$39,600,000	.	.	\$2,629,993	.	\$3,359,584	.	\$24,260,977	.	Not Completed
31	Cities	Seattle	City Justice Center	\$92,000,000	\$92,000,000	\$0	\$2,938,082	\$2,588,995	\$8,131,698	\$7,630,736	\$68,350,591	\$71,119,063	Yes
11	Cities	Seattle	Landsburg Fish Passage & Diversion Facility	\$14,650,000	\$14,761,371	(\$111,371)	\$1,500,000	\$1,561,371	\$2,150,000	\$2,200,000	\$11,000,000	\$11,000,000	Yes
43	Cities	Seattle	McCaw Hall	\$127,780,000	\$127,464,756	\$315,244	\$2,873,008	\$2,922,097	\$9,425,829	\$10,120,659	\$100,472,206	\$100,295,658	Yes
109	Cities	Seattle	Park 90-5	.	.	.	.	.	.	.	.	.	.
95	Cities	Seattle	Police West Precinct Station and Community	\$19,680,000	\$19,680,000	\$0	.	.	\$1,100,000	\$1,600,000	.	.	.
32	Cities	Seattle	Seattle Central Library	\$155,651,000	\$155,612,000	\$39,000	\$6,474,000	\$7,463,000	\$13,367,000	\$14,900,000	\$103,064,000	\$115,757,000	No
30	Cities	Seattle	Seattle City Hall	\$72,000,000	\$72,000,000	\$0	\$1,933,218	\$2,082,694	\$5,317,000	\$5,447,550	\$53,578,379	\$57,220,177	Yes
111	Cities	Seattle Public Utilities	Cedar River Sockeye Hatchery Project	.	.	.	.	.	.	.	.	.	.
29	City PDA	Seattle-Chinatown International District	International District Village Square Ph	\$26,324,000	\$25,750,000	\$574,000	\$1,400,000	\$1,400,000	\$1,500,000	\$1,800,000	\$14,700,000	\$14,270,000	Yes
33	Counties	King County	King County Courthouse	.	.	.	.	.	.	.	.	.	.
34	Counties	King County	King County Jail	.	.	.	.	.	.	.	.	.	.
28	Counties	King County, Department of Natural Resource	Brightwater Treatment Facility	\$639,610,404	.	.	\$25,925,860	.	\$51,270,595	.	\$384,028,150	.	Not Completed
38	Counties	Pierce County	Adult Detention Facility Construction an	\$53,700,000	\$58,500,000	(\$4,800,000)	.	.	\$3,200,000	\$3,600,000	\$36,144,780	\$40,150,000	No
97	Counties	Snohomish County	Denney Juvenile Justice Center	\$24,000,000	.	.	.	.	\$1,500,000	\$1,500,000	.	.	.
98	Counties	Snohomish County	Snohomish County City Redevelopment	.	.	.	.	.	.	.	.	.	.
71	Ferries	Washington State Ferries	Anacortes Terminal Relocation	\$19,200,000	.	.	\$1,000,000	.	\$8,000,000	.	\$28,200,000	.	Not Completed
27	GA	GA	WA Sate Legislative Building Rehabilitation	\$101,000,000	.	.	\$3,600,000	.	\$10,100,000	.	\$71,700,000	.	No
15	GA	GA/Cascadia CC	UW-CCC Bothel Branch Campus Phase I & II	\$197,140,000	\$197,140,000	\$0	\$2,533,882	\$2,533,882	\$18,756,427	\$17,165,849	\$132,274,892	\$132,332,582	Yes
26	GA	GA/Department of Veterans Affairs	WA State Veterans Home	\$47,335,399	\$47,935,277	(\$599,878)	\$645,736	\$454,780	\$4,203,689	\$4,203,689	\$34,010,837	\$34,010,837	No
106	GA	GA/DOC	Airway Heights Corrections Center	\$113,000,000	\$113,000,000	\$0	.	.	.	\$7,000,000	.	\$80,000,000	Yes
10	GA	GA/DOC	Larch & Cedar Creek Corrections Centers	\$22,000,000	\$18,815,229	\$3,184,771	\$555,000	\$555,000	\$1,689,049	\$1,689,049	.	\$14,377,781	Yes
16	GA	GA/DOC	Monroe Close Custody Conversion & Repair	\$4,375,588	\$5,477,187	(\$1,101,599)	\$127,444	\$144,789	\$550,776	\$427,947	\$2,902,047	\$4,337,419	Yes
17	GA	GA/DOC	Special Offender Unit--Expand to 400 bed	\$42,942,628	\$42,942,628	\$0	\$1,285,867	\$1,005,796	\$3,507,879	\$3,379,250	\$32,975,760	\$30,847,208	Yes
18	GA	GA/DOC	Stafford Creek Corrections Center, Phase	\$197,573,938	\$182,085,383	\$15,488,555	\$5,052,800	\$4,409,522	\$14,335,459	\$11,682,736	\$159,241,847	\$142,262,970	No
20	GA	GA/DOC	Washington State Reformatory - 400 Bed A	\$18,733,120	\$17,489,236	\$1,243,884	\$512,880	\$561,994	\$1,518,731	\$1,458,173	\$13,767,583	\$13,232,859	Yes
8	GA	GA/DOC	WCC 97-99 Correctional Industries & Mast	\$4,161,184	\$3,795,369	\$365,815	\$121,946	\$125,819	\$525,163	\$407,549	\$2,807,664	\$3,190,735	Yes
72	GA	GA/DOC	WCCW Mental Health & Recep.	\$24,800,000	\$19,186,280	\$5,613,720	\$946,710	\$713,710	\$2,208,978	\$2,380,217	\$16,849,081	\$14,811,114	Yes
19	GA	GA/DOC	WCCW Replace G Units with 256 Bed Housing	\$9,929,026	\$8,186,761	\$1,742,265	\$353,305	\$353,305	\$899,987	\$974,918	\$7,935,144	\$6,858,538	No
22	GA	GA/Everett CC	Glacier/Pilchuck & Monte Cristo - Arts &	\$26,297,300	.	.	\$144,700	.	\$2,107,800	.	\$18,848,490	.	Not Completed
23	GA	GA/Everett CC	Undergraduate Education Center	\$34,897,240	.	.	\$100,000	.	\$1,908,000	.	\$22,527,000	.	Not Completed
24	GA	GA/Highline CC	HCC/CWU Higher Education Center	\$30,828,000	\$30,828,000	\$0	\$660,000	\$880,757	\$3,531,723	\$4,168,700	\$20,490,000	\$21,905,000	Yes
25	GA	GA/South Puget Sound	Science Complex Addition	.	.	.	.	.	.	.	.	.	Not Completed
86	GA	GA-BCC	Robinswood School Replacement (Bldg R)	\$24,000,000	\$23,053,593	\$946,407	.	.	\$4,068,223	\$4,068,223	\$18,985,370	\$18,985,370	Yes
110	GA	GA-DOC	Washington Corrections Center for Women	\$32,000,000	\$32,000,000	\$0	.	.	.	\$2,187,500	.	.	.
21	GA	GA-DSHS	Special Commitmt Center Construction	\$61,665,000	\$61,659,779	\$5,221	\$1,250,000	\$1,535,150	\$4,750,000	\$4,734,304	\$48,325,000	\$46,542,100	Yes
46	Hospitals	Skagit Valley Public Hospital District #	Island Hospital	\$40,000,000	.	.	\$500,000	.	\$4,500,000	.	\$35,000,000	.	Not Completed
3	Hospitals	Skagit Valley Public Hospital District N	Skagit Valley Hospital	\$87,887,000	.	.	\$1,100,000	.	\$8,015,000	.	\$58,405,000	.	Not Completed
2	K-12 Schools	Aberdeen School District	Aberdeen High School	\$53,863,000	.	.	\$782,000	.	\$5,156,809	.	\$36,315,900	.	Not Completed
7	K-12 Schools	Eastmont School District	Eastmont Middle School	\$12,455,338	\$12,221,808	\$233,530	\$274,600	\$307,800	\$857,594	\$925,467	\$11,313,144	\$10,988,541	Yes
13	K-12 Schools	Evergreen School District	Evergreen High School	.	.	.	.	.	.	.	.	.	Not Completed
92	K-12 Schools	Griffin School District #324	Elementary/Middle School	\$12,800,000	\$14,019,080	(\$1,219,080)	\$192,000	\$206,300	\$1,019,137	\$1,164,962	\$9,075,000	\$10,834,030	No
35	K-12 Schools	Lake Washington School District	Mann Elementary School	\$11,683,439	\$12,512,828	(\$829,389)	\$175,252	\$171,305	\$776,875	\$1,085,318	\$9,484,018	\$9,517,905	No
36	K-12 Schools	Northshore School District	Bothell High School, Phase 2	\$20,500,000	.	.	\$1,000,000	.	\$2,000,000	.	\$13,200,000	.	Not Completed
37	K-12 Schools	Northshore School District	Northshore Junior High School	\$25,800,000	\$25,451,566	\$348,434	\$1,000,000	\$500,000	\$1,698,654	\$1,969,154	\$20,000,000	\$19,561,036	Yes
99	K-12 Schools	Olympia School District	New Capital High School	.	.	.	.	.	.	.	.	.	Not Completed
100	K-12 Schools	Seattle School District	Cleveland High School	\$60,386,000	.	.	\$4,108,858	.	\$4,715,935	.	\$40,951,917	.	Not Completed
44	K-12 Schools	Seattle School District	Garfield High School	\$78,780,000	.	.	\$3,411,043	.	\$6,089,769	.	\$58,542,380	.	Not Completed
45	K-12 Schools	Seattle School District	Nathan Hale High School	.	.	.	.	.	.	.	.	.	No
101	K-12 Schools	Seattle School District	Roosevelt High School	\$84,522,000	.	.	\$365,900	.	\$6,796,103	.	\$56,790,961	.	No
94	K-12 Schools	Spokane School District	Rogers High School	.	.	.	.	.	.	.	.	.	Not Completed
93	K-12 Schools	Spokane School District	Shadle Park High School	.	.	.	.	.	.	.	.	.	Not Completed
49	K-12 Schools	Tacoma School District	Lincoln High School	\$51,700,418	.	.	\$1,171,240	.	\$3,627,034	.	\$35,277,000	.	Not Completed



Appendix E Project Cost Summary - continued

2005 Survey Code	RCW Code	Agency	Project Name	Total project cost budget	Total project cost actual	Total project cost budget - actual	Total mgt cost budget	Total mgt cost actual	Total design cost budget	Total design cost actual	Total construction cost budget	Total construction cost actual	Was the project completed within budget?		
1	K-12 Schools	Tacoma School District #10	Stadium High School Modernization and Ad	\$88,085,987	.	.	\$2,250,000	.	\$6,965,950	.	\$66,169,278	.	Not Completed		
4	K-12 Schools	Wahluke School District	Wahluke High School	\$20,407,512	.	.	\$354,802	.	\$823,000	.	\$15,921,280	.	Not Completed		
104	Other	Pierce Transit	Pierce Transit - Maintenance Facility Up	.	.	.	.	.	.	.	.	.	.		
105	Other	Pierce Transit	Pierce Transit - Tacoma Dome Station Par	.	.	.	.	.	.	.	.	.	.		
90	Other	Seattle Housing Authority	NewHolly Hope VI Redev. Ph 1	\$85,846,349	\$85,846,349	\$0	\$3,568,866	\$3,568,866	\$4,596,423	\$4,596,423	\$67,301,512	\$67,301,512	Yes		
89	Other	Seattle Public Housing Authority	High Point Hope VI Redev. Ph 1	.	.	.	.	.	.	.	\$77,666,867	.	Not Completed		
47	Other	Seattle Public Housing Authority	NewHolly Ph. 2	\$44,195,338	\$44,120,391	\$74,947	\$790,075	\$790,075	\$4,077,752	\$4,077,752	\$29,291,459	\$30,221,394	Yes		
48	Other	Seattle Public Housing Authority	NewHolly Ph. 3	\$65,561,484	\$62,114,454	\$3,447,030	\$1,006,000	\$796,022	\$4,838,528	\$6,405,212	\$51,638,248	\$49,739,160	Yes		
91	Other	Seattle Public Housing Authority	Rainer Vista Hope VI Redev. Ph 1	\$46,750,000	.	.	\$750,000	.	\$7,000,000	.	\$39,000,000	.	Not Completed		
9	PFD	Clark County Public Facilities District	Exhibition Center	\$12,540,500	.	.	.	.	\$1,504,860	.	\$14,039,439	.	Yes		
102	PFD	Edmonds PFD	Center for the Arts	.	.	.	.	.	.	.	.	.	Not Completed		
87	PFD	OT Spokane PFD	Spokane Convention Center Expansion	\$79,400,000	.	.	\$20,073,117	.	\$3,795,883	.	\$55,531,000	.	Not Completed		
96	PFD	Pierce County	Convention Center	.	.	.	.	.	.	.	.	.	Not Completed		
103	PFD	Seattle PFD	WA Baseball Stadium SAFECO Field	\$498,350,000	.	.	.	.	.	.	.	.	.		
5	PFD	Skagit Regional Public Facilities District	McIntyre Hall, Performing Arts and Conference	\$17,000,000	\$17,500,000	(\$500,000)	\$250,000	\$250,000	\$1,750,000	\$1,800,000	\$15,000,000	\$15,450,000	Yes		
40	Ports	Port of Seattle	C1 Baggage Facility	\$142,203,300	.	.	\$15,722,000	.	\$10,530,800	.	\$102,366,199	.	Not Completed		
39	Ports	Port of Seattle	SeaTac Parking Garage	\$60,000,000	\$72,000,000	(\$12,000,000)	.	\$1,285,596	\$6,100,000	\$8,239,000	.	\$62,475,404	Yes		
42	Ports	Port of Seattle	Shilshole Marina Redevelopment	\$78,500,000	.	.	.	.	.	.	\$50,194,138	.	Not Completed		
107	Ports	Port of Seattle	World Trade Center	\$19,210,747	\$19,210,747	\$0	.	.	.	.	.	.	.		
50	UW	University of Washington	Architecture Hall Renovation	\$25,484,000	.	.	\$1,553,081	.	\$3,099,571	.	\$17,409,616	.	Not Completed		
51	UW	University of Washington	Bioengineering-Genome Sciences Bldg	\$150,000,000	.	.	\$5,311,237	.	\$18,528,455	.	\$111,923,871	.	Not Completed		
53	UW	University of Washington	Cascade Tower Renovation	\$14,369,991	\$14,043,000	\$326,991	\$479,644	\$540,000	\$1,942,167	\$1,656,320	\$10,931,552	\$10,841,326	Yes		
54	UW	University of Washington	Conibear Shellhouse	\$16,700,000	.	.	\$621,000	.	\$2,191,000	.	\$12,353,000	.	Not Completed		
55	UW	University of Washington	Dempsey Indoor Practice Facility	\$31,299,000	\$29,297,000	\$2,002,000	\$1,249,000	\$1,198,000	\$4,119,000	\$4,920,000	\$25,241,000	\$22,723,000	Yes		
56	UW	University of Washington	EE/CSE Phase 2 Expansion	\$71,700,000	\$71,700,000	\$0	\$1,899,000	\$1,899,000	\$5,675,000	\$5,675,000	\$44,534,852	\$49,501,685	Yes		
57	UW	University of Washington	Guggenheim Hall Renovation	\$28,323,000	.	.	\$1,661,003	.	\$3,287,233	.	\$19,765,352	.	Not Completed		
58	UW	University of Washington	Harborview Bond Program	\$292,800,000	.	.	\$9,045,873	.	\$36,696,147	.	\$209,897,934	.	Not Completed		
59	UW	University of Washington	Harborview Research & Training Facility	\$78,761,000	\$78,761,000	\$0	\$2,664,691	\$2,664,691	\$8,132,831	\$8,132,831	\$56,788,270	\$56,788,270	Yes		
60	UW	University of Washington	Hec Ed Pavilion Renovation	\$44,508,000	\$44,080,729	\$427,271	\$1,372,000	\$1,349,391	\$4,382,000	\$4,295,600	\$38,316,000	\$38,319,417	Yes		
61	UW	University of Washington	IMA Expansion	\$43,300,000	\$43,432,646	(\$132,646)	\$1,323,000	\$1,904,646	\$4,198,000	\$5,230,000	\$27,000,000	\$31,144,680	No		
62	UW	University of Washington	Johnson Hall Renovation	\$55,290,000	.	.	\$3,159,000	.	\$6,565,000	.	\$37,460,441	.	Not Completed		
63	UW	University of Washington	Law School Building	\$74,386,500	\$82,116,000	(\$7,729,500)	\$1,529,000	\$1,862,000	\$8,049,000	\$8,164,000	\$62,589,000	\$62,643,000	Yes		
64	UW	University of Washington	Oceanography Research & Training	\$80,780,000	\$80,015,242	\$764,758	\$1,817,864	\$1,756,572	\$8,838,718	\$8,518,820	\$67,080,735	\$67,666,360	Yes		
65	UW	University of Washington	Pacific Tower	\$34,954,000	\$34,168,000	\$786,000	\$905,000	\$1,174,000	\$4,599,000	\$4,445,000	\$22,929,251	\$22,346,398	Yes		
66	UW	University of Washington	Surgery Pavilion	\$87,500,000	\$87,930,000	(\$430,000)	\$3,165,000	\$3,097,000	\$11,800,000	\$11,400,000	\$65,900,000	\$66,860,000	Yes		
67	UW	University of Washington	Suzzallo Library Renovation	\$47,257,000	\$47,257,000	\$0	\$1,963,000	\$2,046,000	\$6,364,000	\$6,411,000	\$33,479,742	\$31,489,871	Yes		
68	UW	University of Washington	Tacoma Branch Campus Phase 1A	\$33,887,012	\$33,887,012	\$0	.	.	.	.	\$23,093,393	\$23,093,393	Yes		
70	UW	University of Washington	Tacoma Branch Campus Phase 2B	\$44,349,000	.	.	\$1,500,000	\$1,812,000	\$4,712,000	\$6,670,714	\$33,928,989	.	.		
73	WSU	Washington State University	Biotechnology/ Life Sciences Facility (R	\$61,930,388	.	.	\$21,780,000	.	\$5,754,666	.	\$45,949,820	.	Not Completed		
74	WSU	Washington State University	ELSB Vancouver	\$29,900,000	\$29,900,000	\$0	\$1,335,000	\$1,335,000	\$3,463,644	\$3,463,644	\$20,510,986	\$20,510,986	Yes		
75	WSU	Washington State University	Energy Plan (Steam Plant Redevelopment)	\$41,000,000	\$40,761,984	\$238,016	\$2,184,000	\$2,184,000	\$4,900,000	\$4,900,000	\$33,341,000	\$31,981,717	Yes		
76	WSU	Washington State University	Johnson Hall - Plant Biosciences Complex	\$39,000,000	.	.	\$1,515,000	.	\$4,396,620	.	\$28,417,669	.	Not Completed		
78	WSU	Washington State University	Scholars Hall	\$15,300,000	\$15,300,000	\$0	\$645,941	\$569,941	\$1,661,929	\$1,963,596	\$10,706,389	\$10,321,726	Yes		
77	WSU	Washington State University	School of Communication Addition (Murrow	\$12,665,000	\$12,665,000	\$0	\$362,472	\$362,472	\$1,410,441	\$1,837,353	\$7,828,130	\$7,868,319	Yes		
79	WSU	Washington State University	Spokane Academic Center	\$33,850,000	.	.	\$1,314,000	.	\$2,880,000	.	\$20,251,024	.	Not Completed		
80	WSU	Washington State University	Spokane Health Sciences Bldg	\$39,061,222	\$39,061,222	\$0	\$1,095,900	\$1,095,900	\$3,343,122	\$3,343,122	.	.	Yes		
81	WSU	Washington State University	Spokane Nursing Center	\$34,600,000	.	.	\$1,264,000	.	\$2,885,000	.	\$25,271,000	.	Not Completed		
108	WSU	Washington State University	Student Recreation Center	.	.	.	.	.	.	.	.	.	.		
82	WSU	Washington State University	Teaching and Learning Center	\$41,572,435	\$41,572,435	\$0	\$1,273,200	\$1,273,200	\$3,145,915	\$3,145,915	\$24,275,224	\$24,275,224	Yes		
85	WSU	Washington State University	Tri-Cities Bio-Products Facility	.	.	.	.	.	.	.	.	.	Not Completed		
83	WSU	Washington State University	Vancouver Multi-media Classroom Bldg	\$17,500,000	\$17,500,000	\$0	\$870,000	\$870,000	\$1,740,000	\$1,740,000	\$12,265,729	\$12,265,729	Yes		
84	WSU	Washington State University	Vancouver Student Services	\$12,350,000	.	.	\$704,000	.	\$1,714,000	.	\$7,988,000	.	Not Completed		
Response Count				108	108	90	52	52	78	46	84	53	82	48	94



Appendix F Contract Cost Summary

2005 Survey Code	RCW Code	Agency Code	Project Name	MACC negotiated	MACC actual	Fee % neg	Fee % actual	Fee \$ negotiated	Fee \$ actual	Pre Const Service \$ negotiated	Pre Const Service \$ actual	GC \$ negotiated	GC \$ actual	Contract Budget (MACC+Fee+G C)	Contract Actual (MACC+Fee+G C)	Contract Budget Actual	Was the project completed within budget?
6	Cities	Bellevue	New City Building Redevelopment	\$55,465,720	.	4.00	.	\$2,218,629	.	\$310,000	.	\$5,409,163	.	\$63,093,512	.	.	No
12	Cities	Everett	Water Pollution Control Facility Phase A	\$33,995,370	.	4.30	.	\$1,682,771	.	\$268,000	.	\$1,695,000	.	\$37,373,141	.	.	Not Completed
88	Cities	Seattle	Aquarium, Pier 59 Renovations	.	.	.	.	.	.	.	.	.	.	.	.	.	Not Completed
41	Cities	Seattle	City Fire Station #10	.	.	.	.	.	.	\$198,000	.	.	.	.	.	.	Not Completed
31	Cities	Seattle	City Justice Center	\$68,050,590	\$71,119,063	3.95	3.95	\$2,585,857	\$2,731,581	\$300,000	\$253,900	\$5,431,881	\$5,490,746	\$76,068,328	\$79,341,390	(\$3,273,062)	Yes
11	Cities	Seattle	Landsburg Fish Passage & Diversion Facility	\$8,350,546	\$7,734,785	6.00	6.00	\$501,033	\$501,033	\$150,000	\$150,000	\$822,307	\$822,307	\$9,673,886	\$9,058,125	\$615,761	Yes
43	Cities	Seattle	McCaw Hall	\$91,581,025	\$100,295,658	2.52	2.25	\$1,678,686	\$1,854,467	\$284,552	\$284,552	\$6,373,755	\$8,018,469	\$99,633,466	\$110,168,594	(\$10,535,128)	Yes
109	Cities	Seattle	Park 90-5	.	.	.	.	.	.	.	.	.	.	.	.	.	.
95	Cities	Seattle	Police West Precinct Station and Community	\$13,987,355	.	3.00	.	\$282,000	.	.	.	\$10,098,245	.	\$24,367,600	.	.	.
32	Cities	Seattle	Seattle Central Library	\$84,465,000	\$100,761,000	4.30	4.30	\$3,632,000	\$4,301,000	\$695,000	\$986,000	\$8,700,000	\$9,709,000	\$96,797,000	\$114,771,000	(\$17,974,000)	No
30	Cities	Seattle	Seattle City Hall	\$53,928,380	\$57,220,177	3.95	3.95	\$1,968,619	\$1,968,619	\$150,000	\$150,000	\$5,279,817	\$5,750,395	\$61,176,816	\$64,939,191	(\$3,762,375)	Yes
111	Cities	Seattle Public Utilities	Cedar River Sockeye Hatchery Project	.	.	.	.	.	.	.	.	.	.	.	.	.	.
29	City PDA	Seattle-Chinatown International District	International District Village Square Ph	\$11,500,000	\$10,826,300	4.75	4.75	\$653,000	\$657,100	\$60,000	\$65,000	\$2,553,000	\$2,304,900	\$14,706,000	\$13,788,300	\$917,700	Yes
33	Counties	King County	King County Courthouse	.	.	.	.	.	.	.	.	.	.	.	.	.	.
34	Counties	King County	King County Jail	.	.	.	.	.	.	.	.	.	.	.	.	.	.
28	Counties	King County, Department of Natural Resource	Brightwater Treatment Facility	.	.	1.98	.	.	.	\$1,424,428	.	.	.	.	.	.	Not Completed
38	Counties	Pierce County	Adult Detention Facility Construction an	\$36,144,780	.	2.80	2.80	\$1,018,160	\$1,018,160	\$350,000	\$572,256	\$2,922,077	\$2,922,077	\$40,085,017	.	.	No
97	Counties	Snohomish County	Denney Juvenile Justice Center	\$16,000,000	\$19,122,878	3.50	.	\$530,000	.	.	.	\$1,190,898	.	\$17,720,898	.	.	.
98	Counties	Snohomish County	Snohomish County City Redevelopment	.	.	.	.	.	.	.	.	.	.	.	.	.	.
71	Ferries	Washington State Ferries	Anacortes Terminal Relocation	.	.	.	.	.	.	.	.	.	.	.	.	.	Not Completed
27	GA	GA	WA Sate Legislative Building Rehabilitation	\$61,108,112	.	3.00	.	\$1,796,530	.	\$700,000	.	\$4,403,549	.	\$67,308,191	.	.	No
15	GA	GA/Cascadia CC	UW-CCC Bothel Branch Campus Phase I & II	\$111,136,050	\$111,136,050	3.00	3.00	\$3,343,438	\$3,343,438	\$1,595,000	\$1,595,000	\$3,049,811	\$3,049,811	\$117,529,299	\$117,529,299	\$0	Yes
26	GA	GA/Department of Veterans Affairs	WA State Veterans Home	\$31,630,000	\$31,360,000	3.75	3.75	\$1,186,125	\$1,186,125	\$300,000	\$300,000	\$825,395	\$825,395	\$33,641,520	\$33,371,520	\$270,000	No
106	GA	GA/DOC	Airway Heights Corrections Center	\$79,140,000	\$79,140,000	2.90	2.90	\$2,122,900	\$2,122,900	.	.	\$2,379,319	\$2,379,319	\$83,642,219	\$83,642,219	\$0	Yes
10	GA	GA/DOC	Larch & Cedar Creek Corrections Centers	\$12,830,543	\$11,113,215	3.25	3.25	\$411,557	\$445,260	.	.	\$840,750	\$911,938	\$14,082,850	\$12,470,413	\$1,612,437	Yes
16	GA	GA/DOC	Monroe Close Custody Conversion & Repair	\$2,624,886	\$3,788,505	3.50	3.50	\$100,000	\$135,788	\$47,250	\$47,250	\$275,954	\$352,577	\$3,000,840	\$4,276,870	(\$1,276,030)	Yes
17	GA	GA/DOC	Special Offender Unit--Expand to 400 bed	\$27,957,300	\$28,393,282	3.50	3.50	\$978,505	\$1,048,844	\$87,750	\$87,750	\$1,135,510	\$1,201,022	\$30,071,315	\$30,643,148	(\$571,833)	Yes
18	GA	GA/DOC	Stafford Creek Corrections Center, Phase	\$119,711,116	\$122,181,552	1.85	1.85	\$2,214,666	\$2,283,375	\$524,576	\$524,576	\$6,231,669	\$6,945,531	\$128,157,451	\$131,410,458	(\$3,253,007)	No
20	GA	GA/DOC	Washington State Reformatory - 400 Bed A	\$11,411,798	\$11,293,541	3.00	3.00	\$342,354	\$372,792	\$30,000	\$30,000	\$465,000	\$473,114	\$12,219,152	\$12,139,447	\$79,705	Yes
8	GA	GA/DOC	WCC 97-99 Correctional Industries & Mast	\$2,660,082	\$2,814,020	4.00	6.00	\$106,403	\$205,967	\$75,000	\$75,000	\$162,322	\$162,322	\$2,928,807	\$3,182,309	(\$253,502)	Yes
72	GA	GA/DOC	WCCW Mental Health & Recep.	\$12,272,695	\$11,376,598	3.20	3.20	\$412,363	\$423,563	\$110,200	\$110,200	\$687,924	\$697,598	\$13,372,982	\$12,497,759	\$875,223	Yes
19	GA	GA/DOC	WCCW Replace G Units with 256 Bed Housing	\$7,760,331	\$6,205,123	3.00	3.90	\$232,809	\$244,496	\$101,382	\$101,382	\$367,050	\$307,536	\$8,360,190	\$6,757,155	\$1,603,035	No
22	GA	GA/Everett CC	Glacier/Pilchuck & Monte Cristo - Arts &	\$18,000,000	.	4.50	.	\$810,000	.	\$170,000	.	\$633,457	.	\$19,443,457	.	.	Not Completed
23	GA	GA/Everett CC	Undergraduate Education Center	.	.	.	.	.	.	.	.	.	.	.	.	.	Not Completed
24	GA	GA/Highline CC	HCC/CWU Higher Education Center	\$18,122,500	\$18,800,000	4.50	4.50	\$815,500	\$846,000	\$170,000	\$170,000	\$728,000	\$728,000	\$19,666,000	\$20,374,000	(\$708,000)	Yes
25	GA	GA/South Puget Sound	Science Complex Addition	.	.	.	.	.	.	.	.	.	.	.	.	.	Not Completed
86	GA	GA-BCC	Robinswood School Replacement (Bldg R)	\$16,000,000	\$16,000,000	4.00	4.00	\$640,000	\$640,000	\$180,000	\$180,000	\$617,185	\$617,185	\$17,257,185	\$17,257,185	\$0	Yes
110	GA	GA-DOC	Washington Corrections Center for Women	.	.	.	.	.	.	.	.	.	.	.	.	.	.
21	GA	GA-DSHS	Special Commitment Center Construction	\$48,324,948	\$44,746,737	2.80	2.80	\$1,352,820	\$1,240,129	\$183,000	\$617,038	\$2,269,000	\$2,882,362	\$51,946,768	\$48,869,228	\$3,077,540	Yes
46	Hospitals	Skagit Valley Public Hospital District #	Island Hospital	.	.	.	.	.	.	.	.	.	.	.	.	.	Not Completed
3	Hospitals	Skagit Valley Public Hospital District N	Skagit Valley Hospital	\$46,729,000	.	2.50	.	\$1,168,000	.	\$180,000	.	\$4,060,000	.	\$51,957,000	.	.	Not Completed
2	K-12 Schools	Aberdeen School District	Aberdeen High School	\$34,466,800	.	3.00	.	\$929,000	.	\$300,000	.	\$1,220,000	.	\$36,615,800	.	.	Not Completed
7	K-12 Schools	Eastmont School District	Eastmont Middle School	\$13,007,424	\$13,007,424	2.75	2.75	\$327,734	\$327,734	\$88,817	\$88,817	\$500,000	\$500,000	\$13,835,158	\$13,835,158	\$0	Yes
13	K-12 Schools	Evergreen School District	Evergreen High School	.	.	.	.	.	.	.	.	.	.	.	.	.	Not Completed
92	K-12 Schools	Griffin School District #324	Elementary/Middle School	\$9,075,000	\$10,834,030	4.50	4.50	\$408,325	\$487,531	\$50,000	\$50,000	\$523,867	\$625,409	\$10,007,192	\$11,946,970	(\$1,939,778)	No
35	K-12 Schools	Lake Washington School District	Mann Elementary School	\$8,650,335	\$9,426,770	5.97	5.97	\$397,005	\$397,005	\$37,500	\$37,500	\$472,025	\$472,205	\$9,519,365	\$10,295,980	(\$776,615)	No
36	K-12 Schools	Northshore School District	Bothell High School, Phase 2	\$13,896,211	\$15,382,674	3.50	2.90	\$469,920	\$447,723	\$100,000	\$240,000	\$776,400	\$826,400	\$15,142,531	\$16,656,797	(\$1,514,266)	Not Completed
37	K-12 Schools	Northshore School District	Northshore Junior High School	\$18,517,834	\$19,561,036	3.75	3.30	\$642,803	\$642,803	\$125,000	\$125,000	\$152,784	\$152,784	\$19,313,421	\$20,356,623	(\$1,043,202)	Yes
99	K-12 Schools	Olympia School District	New Capital High School	.	.	.	.	.	.	.	.	.	.	.	.	.	Not Completed
100	K-12 Schools	Seattle School District	Cleveland High School	\$39,897,500	.	1.90	.	\$772,000	.	\$600,000	.	\$1,775,000	.	\$42,444,500	.	.	Not Completed
44	K-12 Schools	Seattle School District	Garfield High School	.	.	.	.	.	.	.	.	.	.	.	.	.	Not Completed
45	K-12 Schools	Seattle School District	Nathan Hale High School	\$6,012,086	.	3.00	.	\$175,000	\$175,000	\$149,630	\$149,630	\$517,000	.	\$6,704,086	.	.	No
101	K-12 Schools	Seattle School District	Roosevelt High School	\$53,942,961	.	2.00	.	\$1,064,000	.	\$477,631	.	\$1,784,000	.	\$56,790,961	.	.	No
94	K-12 Schools	Spokane School District	Rogers High School	.	.	.	.	.	.	.	.	.	.	.	.	.	Not Completed
93	K-12 Schools	Spokane School District	Shadle Park High School	.	.	.	.	.	.	.	.	.	.	.	.	.	Not Completed
49	K-12 Schools	Tacoma School District	Lincoln High School	\$30,000,000	\$3	3.25	.	\$975,000	.	\$300,000	.	\$1,902,000	.	\$32,877,000	.	.	Not Completed
1	K-12 Schools	Tacoma School District #10	Stadium High School Modernization and Ad	\$60,685,550	.	4.50	.	\$2,475,000	.	\$345,000	\$529,667	\$3,008,698	.	\$66,169,248	.	.	Not Completed
4	K-12 Schools	Wahluke School District	Wahluke High School	\$13,805,643	.	3.00	.	\$415,523	.	\$135,803	\$135,803	\$851,264	.	\$15,072,430	.	.	Not Completed

Appendix F Contract Cost Summary - continued

2005 Survey Code	RCW Code	Agency Code	Project Name	MACC negotiated	MACC actual	Fee % neg	Fee % actual	Fee \$ negotiated	Fee \$ actual	Pre Const Service \$ negotiated	Pre Const Service \$ actual	GC \$ negotiated	GC \$ actual	Contract Budget (MACC+Fee+G C)	Contract Actual (MACC+Fee+G C)	Contract Budget Actual	Was the project completed within budget?		
104	Other	Pierce Transit	Pierce Transit - Maintenance Facility Up	.	.	.	.	.	.	.	.	.	.	.	.	.	.		
105	Other	Pierce Transit	Pierce Transit - Tacoma Dome Station Par	.	.	.	.	.	.	.	.	.	.	.	.	.	.		
90	Other	Seattle Housing Authority	NewHolly Hope VI Redev. Ph 1	\$60,261,474	\$60,700,326	2.60	3.10	\$1,590,000	\$1,890,165	\$110,000	\$110,000	\$1,895,000	\$2,447,485	\$63,746,474	\$65,037,976	(\$1,291,502)	Yes		
89	Other	Seattle Public Housing Authority	High Point Hope VI Redev. Ph 1	\$58,229,801	.	3.00	.	\$1,892,468	.	\$413,500	.	\$5,262,806	.	\$65,385,075	.	.	Not Completed		
47	Other	Seattle Public Housing Authority	NewHolly Ph. 2	\$26,726,109	\$27,579,260	6.00	6.00	\$1,603,567	\$1,654,756	\$160,000	\$160,000	\$801,783	\$827,378	\$29,131,459	\$30,061,394	(\$929,935)	Yes		
48	Other	Seattle Public Housing Authority	NewHolly Ph. 3	\$45,487,235	\$49,739,160	4.00	4.00	\$1,819,489	\$1,989,566	\$68,028	\$68,028	\$2,200,129	\$2,321,149	\$49,506,853	\$54,049,875	(\$4,543,022)	Yes		
91	Other	Seattle Public Housing Authority	Rainer Vista Hope VI Redev. Ph 1	\$39,200,000	.	3.50	.	\$1,372,000	.	\$200,000	.	\$2,700,000	\$2,558,000	\$43,272,000	.	.	Not Completed		
9	PFD	Clark County Public Facilities District	Exhibition Center	\$12,540,500	.	5.84	.	\$731,914	.	\$0	.	\$140,000	.	\$13,412,414	.	.	Yes		
102	PFD	Edmonds PFD	Center for the Arts	.	.	.	.	.	.	.	.	.	.	.	.	.	Not Completed		
87	PFD	OT Spokane PFD	Spokane Convention Center Expansion	\$45,894,114	.	21.80	.	\$1,000,720	.	\$293,383	.	\$1,891,942	.	\$48,786,776	.	.	Not Completed		
96	PFD	Pierce County	Convention Center	.	.	.	.	.	.	.	.	.	.	.	.	.	Not Completed		
103	PFD	Seattle PFD	WA Baseball Stadium SAFECO Field	\$216,350,000	.	2.55	.	\$5,516,925	.	\$650,000	.	\$3,782,075	.	\$225,649,000	.	.	.		
5	PFD	Skagit Regional Public Facilities District	McIntyre Hall, Performing Arts and Conference	\$12,000,000	\$12,000,000	2.68	2.68	\$322,400	\$322,400	\$100,000	\$150,000	\$488,600	\$488,600	\$12,811,000	\$12,811,000	\$0	Yes		
40	Ports	Port of Seattle	C1 Baggage Facility	\$82,630,371	.	2.60	.	\$2,174,390	.	\$754,960	.	\$5,555,000	.	\$90,359,761	.	.	Not Completed		
39	Ports	Port of Seattle	SeaTac Parking Garage	\$50,508,561	\$59,072,894	3.00	3.00	\$1,515,257	\$1,772,187	\$350,000	\$412,000	\$1,111,018	\$1,218,323	\$53,134,836	\$62,063,404	(\$8,928,568)	Yes		
42	Ports	Port of Seattle	Shilshole Marina Redevelopment	\$45,075,000	.	4.85	.	\$2,186,138	.	\$175,000	.	\$2,514,000	.	\$49,775,138	.	.	Not Completed		
107	Ports	Port of Seattle	World Trade Center	.	.	.	.	.	.	.	.	.	.	.	.	.	.		
50	UW	University of Washington	Architecture Hall Renovation	.	.	.	.	.	.	\$158,904	.	.	.	.	.	.	Not Completed		
51	UW	University of Washington	Bioengineering-Genome Sciences Bldg	\$97,870,393	.	4.00	.	\$3,956,005	.	\$349,650	.	\$2,056,000	.	\$103,882,398	.	.	Not Completed		
53	UW	University of Washington	Cascade Tower Renovation	\$7,892,783	\$7,604,778	3.70	3.70	\$310,000	\$310,000	\$75,000	\$75,000	\$440,000	\$440,000	\$8,642,783	\$8,354,778	\$288,005	Yes		
54	UW	University of Washington	Conibear Shellhouse	\$10,325,344	\$10,288,279	4.50	4.50	\$467,200	\$463,089	\$149,600	\$120,571	\$234,444	\$234,444	\$11,026,988	\$10,985,812	\$41,176	Not Completed		
55	UW	University of Washington	Dempsey Indoor Practice Facility	\$14,900,000	\$14,900,000	.	.	.	.	.	.	\$424,600	\$424,650	.	.	.	Yes		
56	UW	University of Washington	EE/CSE Phase 2 Expansion	\$40,990,365	\$42,248,473	4.50	4.50	\$1,859,635	\$1,904,330	\$334,852	\$357,081	\$1,350,000	\$1,583,400	\$44,200,000	\$45,736,203	(\$1,536,203)	Yes		
57	UW	University of Washington	Guggenheim Hall Renovation	.	.	.	.	.	.	.	.	.	.	.	.	.	Not Completed		
58	UW	University of Washington	Harborview Bond Program	.	.	.	.	.	.	.	.	.	.	.	.	.	Not Completed		
59	UW	University of Washington	Harborview Research & Training Facility	\$46,500,000	\$46,500,000	.	.	.	.	.	.	\$1,670,727	\$1,670,727	.	.	.	Yes		
60	UW	University of Washington	Hec Ed Pavilion Renovation	\$25,793,009	\$33,723,661	4.18	4.18	\$1,045,000	\$1,116,662	\$200,000	\$200,000	\$855,180	\$858,866	\$27,693,189	\$35,699,189	(\$8,006,000)	Yes		
61	UW	University of Washington	IMA Expansion	\$20,455,726	\$23,603,059	5.20	4.50	\$1,053,613	\$1,053,613	\$250,000	\$314,557	\$1,650,598	\$1,650,598	\$23,159,937	\$26,307,270	(\$3,147,333)	No		
62	UW	University of Washington	Johnson Hall Renovation	\$30,608,162	\$32,022,119	3.45	3.45	\$1,057,674	\$1,165,488	\$267,707	\$408,907	\$569,999	\$641,731	\$32,235,835	\$33,829,338	(\$1,593,503)	Not Completed		
63	UW	University of Washington	Law School Building	\$48,267,156	\$52,839,082	3.90	3.70	\$1,941,926	\$1,954,563	\$299,054	\$299,054	\$1,611,912	\$1,611,912	\$51,820,994	\$56,405,557	(\$4,584,563)	Yes		
64	UW	University of Washington	Oceanography Research & Training	\$55,700,124	\$68,144,099	.	.	.	.	.	.	\$1,390,000	.	.	.	.	Yes		
65	UW	University of Washington	Pacific Tower	\$19,985,750	\$17,561,461	3.50	4.30	\$753,385	\$753,385	\$180,000	\$183,574	\$1,378,700	\$1,588,836	\$22,117,835	\$19,903,682	\$2,214,153	Yes		
66	UW	University of Washington	Surgery Pavilion	\$59,328,776	\$62,816,310	4.00	3.80	\$2,397,447	\$2,397,447	\$297,152	\$297,152	\$1,836,230	\$1,836,230	\$63,562,453	\$67,049,987	(\$3,487,534)	Yes		
67	UW	University of Washington	Suzzallo Library Renovation	\$19,031,579	\$22,547,749	4.50	4.50	\$856,421	\$1,004,040	\$310,000	\$607,475	\$412,000	\$473,845	\$20,300,000	\$24,025,634	(\$3,725,634)	Yes		
68	UW	University of Washington	Tacoma Branch Campus Phase 1A	\$20,532,576	.	3.50	3.50	\$718,640	.	.	.	\$648,000	\$648,000	\$21,899,216	.	.	Yes		
70	UW	University of Washington	Tacoma Branch Campus Phase 2B	\$24,468,078	.	4.30	4.30	\$1,052,127	\$1,078,558	\$250,000	\$322,818	\$479,443	\$763,550	\$25,999,648	.	.	.		
73	WSU	Washington State University	Biotechnology/ Life Sciences Facility (R	.	.	.	.	.	.	\$336,505	.	.	.	.	.	.	Not Completed		
74	WSU	Washington State University	ELSB Vancouver	\$15,834,062	\$14,394,491	25.50	25.50	\$405,000	\$405,000	\$0	\$0	\$765,133	\$765,133	\$17,004,195	\$15,564,624	\$1,439,571	Yes		
75	WSU	Washington State University	Energy Plan (Steam Plant Redevelopment)	\$16,314,667	\$16,209,035	2.00	.	\$486,293	\$365,685	\$257,284	\$257,284	\$1,198,181	\$1,419,712	\$17,999,141	\$17,994,432	\$4,709	Yes		
76	WSU	Washington State University	Johnson Hall - Plant Biosciences Complex	\$24,665,605	.	2.30	.	\$567,157	.	\$324,406	.	\$969,000	.	\$26,201,762	.	.	Not Completed		
78	WSU	Washington State University	Scholars Hall	\$8,945,863	\$8,945,863	2.40	2.40	\$244,800	\$244,800	\$253,953	\$253,953	\$509,000	\$509,000	\$9,699,663	\$9,699,663	\$0	Yes		
77	WSU	Washington State University	School of Communication Addition (Morrow	\$6,661,697	.	2.30	.	\$163,863	.	\$114,079	.	\$461,591	.	\$7,287,151	.	.	Yes		
79	WSU	Washington State University	Spokane Academic Center	\$18,109,483	.	2.20	.	\$398,409	.	\$200,000	.	\$1,134,843	.	\$19,642,735	.	.	Not Completed		
80	WSU	Washington State University	Spokane Health Sciences Bldg	\$24,507,824	\$24,507,824	2.23	2.23	\$512,876	\$512,876	\$161,517	\$161,517	\$840,206	\$840,206	\$25,860,906	\$25,860,906	\$0	Yes		
81	WSU	Washington State University	Spokane Nursing Center	.	.	.	.	.	.	\$200,000	.	.	.	.	.	.	Not Completed		
108	WSU	Washington State University	Student Recreation Center	.	.	.	.	.	.	.	.	.	.	.	.	.	.		
82	WSU	Washington State University	Teaching and Learning Center	\$24,275,224	\$24,275,224	2.85	2.85	\$618,439	\$618,435	\$222,391	\$222,391	\$675,000	\$675,000	\$25,568,663	\$25,568,659	\$4	Yes		
85	WSU	Washington State University	Tri-Cities Bio-Products Facility	.	.	.	.	.	.	\$198,594	.	.	.	.	.	.	Not Completed		
83	WSU	Washington State University	Vancouver Multi-media Classroom Bldg	\$10,101,990	\$10,101,990	2.50	2.50	\$252,550	\$252,550	\$100,000	\$100,000	\$766,974	\$766,974	\$11,121,514	\$11,121,514	\$0	Yes		
84	WSU	Washington State University	Vancouver Student Services	.	.	.	.	.	.	\$130,000	.	.	.	.	.	.	Not Completed		
Response Count				108	108	77	51	75	48	74	49	76	49	77	52	74	46	46	94

Appendix G Change Order Summary

2005 Survey Code	RCW Code	Agency Code	Project Name	Were there any change orders?	Owner Scope Changes		Design E&O		Unforeseen Conditions		Contractor Changes		Code/Reg Changes		Other Changes		Total Dollar Volume of Changes	
					Volume	Ratio	Volume	Ratio	Volume	Ratio	Volume	Ratio	Volume	Ratio	Volume	Ratio	Volume	Ratio
6	Cities	Bellevue	New City Building Redevelopment	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
12	Cities	Everett	Water Pollution Control Facility Phase A	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
88	Cities	Seattle	Aquarium, Pier 59 Renovations	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
41	Cities	Seattle	City Fire Station #10	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
31	Cities	Seattle	City Justice Center	Yes	\$0	0.00	\$0	0.00	\$0	0.00	\$2,980,273	3.92	\$0	0.00	\$0	0.00	\$2,980,273	3.92
11	Cities	Seattle	Landsburg Fish Passage & Diversion Facility	Yes	\$487,403	5.04	\$146,690	1.52	\$42,812	0.44	\$0	0.00	\$0	0.00	\$0	0.00	\$676,906	7.00
43	Cities	Seattle	McCaw Hall	Yes	.	.	.	.	.	.	.	.	.	.	.	.	\$10,182,657	10.22
109	Cities	Seattle	Park 90-5	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
95	Cities	Seattle	Police West Precinct Station and Community	.	.	.	.	.	.	.	.	.	.	.	.	.	\$5,930,000	24.34
32	Cities	Seattle	Seattle Central Library	Yes	.	.	.	.	.	.	.	.	.	.	.	.	\$18,265,000	18.87
30	Cities	Seattle	Seattle City Hall	Yes	\$0	0.00	\$0	0.00	\$0	0.00	\$3,291,798	5.38	\$0	0.00	\$0	0.00	\$3,291,798	5.38
111	Cities	Seattle Public Utilities	Cedar River Sockeye Hatchery Project	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
29	City PDA	Seattle-Chinatown International District	International District Village Square Ph	Yes	\$500,000	3.40	\$50,000	0.34	\$300,000	2.04	\$120,000	0.82	\$0	0.00	\$0	0.00	\$970,000	6.60
33	Counties	King County	King County Courthouse	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
34	Counties	King County	King County Jail	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
28	Counties	King County, Department of Natural Resource	Brightwater Treatment Facility	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
38	Counties	Pierce County	Adult Detention Facility Construction an	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
97	Counties	Snohomish County	Denney Juvenile Justice Center	.	\$812,000	4.58	\$0	0.00	\$0	0.00	\$0	0.00	\$0	0.00	\$650,000	3.67	\$1,462,000	8.25
98	Counties	Snohomish County	Snohomish County City Redevelopment	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
71	Ferries	Washington State Ferries	Anacortes Terminal Relocation	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
27	GA	GA	WA Sate Legislative Building Rehabilitation	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
15	GA	GA/Cascadia CC	UW-CCC Bothel Branch Campus Phase I & II	Yes	\$3,899,565	3.32	\$275,318	0.23	\$2,063,727	1.76	\$495,109	0.42	\$605,006	0.51	\$4,229,252	3.60	\$11,567,977	9.84
26	GA	GA/Department of Veterans Affairs	WA State Veterans Home	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
106	GA	GA/DOC	Airway Heights Corrections Center	Yes	.	.	.	.	.	.	.	.	.	.	.	.	\$2,900,000	3.47
10	GA	GA/DOC	Larch & Cedar Creek Corrections Centers	Yes	.	.	.	.	.	.	.	.	.	.	.	.	\$337,828	2.40
16	GA	GA/DOC	Monroe Close Custody Conversion & Repair	Yes	\$325,765	10.86	\$16,860	0.56	\$804,327	26.80	(\$11,412)	(0.38)	\$0	0.00	.	.	\$1,135,540	37.84
17	GA	GA/DOC	Special Offender Unit--Expand to 400 bed	Yes	\$1,560,717	5.19	\$273,974	0.91	\$147,364	0.49	\$0	0.00	\$0	0.00	(\$1,410,220)	(4.69)	\$571,835	1.90
18	GA	GA/DOC	Stafford Creek Corrections Center, Phase	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
20	GA	GA/DOC	Washington State Reformatory - 400 Bed A	Yes	\$109,513	0.90	\$148,138	1.21	\$48,034	0.39	\$0	0.00	\$0	0.00	(\$132,471)	(1.08)	\$173,215	1.42
8	GA	GA/DOC	WCC 97-99 Correctional Industries & Mast	Yes	\$260,429	8.89	\$47,600	1.63	\$3,533	0.12	\$0	0.00	\$0	0.00	\$0	0.00	\$311,562	10.64
72	GA	GA/DOC	WCCW Mental Health & Recep.	Yes	\$355,051	2.65	\$9,812	0.07	\$4,311	0.03	\$128,604	0.96	\$9,094	0.07	\$0	0.00	\$506,872	3.79
19	GA	GA/DOC	WCCW Replace G Units with 256 Bed Housing	Yes	\$379,118	4.53	\$22,773	0.27	\$8,389	0.10	\$0	0.00	\$27,205	0.33	\$0	0.00	\$437,487	5.23
22	GA	GA/Everett CC	Glacier/Pilchuck & Monte Cristo - Arts &	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
23	GA	GA/Everett CC	Undergraduate Education Center	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
24	GA	GA/Highline CC	HCC/CWU Higher Education Center	Yes	\$290,000	1.47	\$201,000	1.02	\$48,000	0.24	\$0	0.00	\$64,000	0.33	\$0	0.00	\$603,000	3.07
25	GA	GA/South Puget Sound	Science Complex Addition	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
86	GA	GA-BCC	Robinswood School Replacement (Bldg R)	Yes	\$2,085,370	12.08	\$150,000	0.87	\$450,000	2.61	\$0	0.00	\$300,000	1.74	\$0	0.00	\$2,985,370	17.30
110	GA	GA-DOC	Washington Corrections Center for Women	Yes	\$9,000,000	.	\$0	0.00	\$0	0.00	\$0	0.00	\$0	0.00	\$754,670	.	\$9,754,670	.
21	GA	GA-DSHS	Special Commitment Center Construction	Yes	\$139,113	0.27	\$23,482	0.05	\$762,482	1.47	\$0	0.00	\$0	0.00	\$2,007,002	3.86	\$2,932,079	5.64
46	Hospitals	Skagit Valley Public Hospital District #	Island Hospital	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Hospitals	Skagit Valley Public Hospital District N	Skagit Valley Hospital	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	K-12 Schools	Aberdeen School District	Aberdeen High School	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	K-12 Schools	Eastmont School District	Eastmont Middle School	Yes	\$215,775	1.56	\$64,317	0.46	\$17,519	0.13	\$87,136	0.63	\$64,953	0.47	\$0	0.00	\$449,700	3.25
13	K-12 Schools	Evergreen School District	Evergreen High School	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
92	K-12 Schools	Griffin School District #324	Elementary/Middle School	Yes	\$827,336	8.27	\$618,602	6.18	\$0	0.00	\$334,954	3.35	\$311,477	3.11	\$0	0.00	\$2,092,369	20.91
35	K-12 Schools	Lake Washington School District	Mann Elementary School	Yes	\$393,810	4.14	\$134,584	1.41	\$220,640	2.32	\$0	0.00	\$27,391	0.29	\$0	0.00	\$776,425	8.16
36	K-12 Schools	Northshore School District	Bothell High School, Phase 2	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
37	K-12 Schools	Northshore School District	Northshore Junior High School	Yes	\$845,328	4.38	\$127,403	0.66	\$76,883	0.40	\$0	0.00	\$61,116	0.32	\$0	0.00	\$1,110,730	5.75
99	K-12 Schools	Olympia School District	New Capital High School	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
100	K-12 Schools	Seattle School District	Cleveland High School	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
44	K-12 Schools	Seattle School District	Garfield High School	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
45	K-12 Schools	Seattle School District	Nathan Hale High School	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
101	K-12 Schools	Seattle School District	Roosevelt High School	Yes	\$490,000	0.86	\$45,972	0.08	\$305,581	0.54	\$1,601,430	2.82	\$0	0.00	\$0	0.00	\$2,442,983	4.30
94	K-12 Schools	Spokane School District	Rogers High School	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
93	K-12 Schools	Spokane School District	Shadle Park High School	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
49	K-12 Schools	Tacoma School District	Lincoln High School	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	K-12 Schools	Tacoma School District #10	Stadium High School Modernization and Ad	Yes	\$91,961	0.14	\$0	0.00	\$0	0.00	\$0	0.00	\$0	0.00	\$0	0.00	\$91,961	0.14



Appendix G Change Order Summary – continued

2005 Survey Code	RCW Code	Agency Code	Project Name	Were there any change orders?	Owner Scope Changes		Design E&O		Unforeseen Conditions		Contractor Changes		Code/Reg Changes		Other Changes		Total Dollar Volume of Changes	
					Volume	Ratio	Volume	Ratio	Volume	Ratio	Volume	Ratio	Volume	Ratio	Volume	Ratio	Volume	Ratio
4	K-12 Schools	Wahluke School District	Wahluke High School	Yes	\$1,637,968	10.87	\$0	0.00	\$0	0.00	\$0	0.00	\$0	0.00	\$0	0.00	\$1,637,968	10.87
104	Other	Pierce Transit	Pierce Transit - Maintenance Facility Up	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
105	Other	Pierce Transit	Pierce Transit - Tacoma Dome Station Par	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
90	Other	Seattle Housing Authority	NewHolly Hope VI Redev. Ph 1	Yes	\$1,629,387	2.56	\$407,347	0.64	\$1,222,041	1.92	\$1,853,564	2.91	\$0	0.00	\$0	0.00	\$5,112,339	8.02
89	Other	Seattle Public Housing Authority	High Point Hope VI Redev. Ph 1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
47	Other	Seattle Public Housing Authority	NewHolly Ph. 2	Yes	\$60,600	0.21	\$59,220	0.20	\$123,068	0.42	\$60,163	0.21	\$0	0.00	\$0	0.00	\$303,051	1.04
48	Other	Seattle Public Housing Authority	NewHolly Ph. 3	Yes	\$618,816	1.25	\$288,204	0.58	\$604,403	1.22	\$301,101	0.61	\$0	0.00	\$0	0.00	\$1,812,524	3.66
91	Other	Seattle Public Housing Authority	Rainier Vista Hope VI Redev. Ph 1	Yes	\$500,000	1.16	\$0	0.00	\$700,000	1.62	\$0	0.00	\$0	0.00	\$0	0.00	\$1,200,000	2.77
9	PFD	Clark County Public Facilities District	Exhibition Center	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
102	PFD	Edmonds PFD	Center for the Arts	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
87	PFD	OT Spokane PFD	Spokane Convention Center Expansion	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
96	PFD	Pierce County	Convention Center	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
103	PFD	Seattle PFD	WA Baseball Stadium SAFECO Field	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	PFD	Skagit Regional Public Facilities District	McIntyre Hall, Performing Arts and Conference	Yes	\$462,000	3.61	\$100,000	0.78	\$50,000	0.39	\$0	0.00	\$0	0.00	\$0	0.00	\$612,000	4.78
40	Ports	Port of Seattle	C1 Baggage Facility	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
39	Ports	Port of Seattle	SeaTac Parking Garage	Yes	\$3,615,420	6.80	\$882,166	1.66	\$642,720	1.21	\$2,417,436	4.55	\$0	0.00	\$0	0.00	\$7,557,742	14.22
42	Ports	Port of Seattle	Shilshole Marina Redevelopment	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
107	Ports	Port of Seattle	World Trade Center	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
50	UW	University of Washington	Architecture Hall Renovation	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
51	UW	University of Washington	Bioengineering-Genome Sciences Bldg	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
53	UW	University of Washington	Cascade Tower Renovation	Yes	.	.	.	.	.	.	.	.	.	.	.	.	\$784,743	9.08
54	UW	University of Washington	Conibear Shellhouse	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
55	UW	University of Washington	Dempsey Indoor Practice Facility	Yes	.	.	.	.	.	.	.	.	.	.	.	.	\$250,000	.
56	UW	University of Washington	EE/CSE Phase 2 Expansion	Yes	\$3,882,576	8.78	\$1,197,671	2.71	\$605,876	1.37	(\$771,875)	(1.75)	\$52,585	0.12	\$0	0.00	\$4,966,833	11.24
57	UW	University of Washington	Guggenheim Hall Renovation	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
58	UW	University of Washington	Harborview Bond Program	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
59	UW	University of Washington	Harborview Research & Training Facility	Yes	\$4,503,000	.	.	.	.	.	.	.	.	.	.	.	\$4,503,000	.
60	UW	University of Washington	Hec Ed Pavilion Renovation	Yes	\$4,992,090	18.03	\$1,173,885	4.24	\$1,910,504	6.90	\$524,611	1.89	\$81,598	0.29	\$0	0.00	\$8,612,688	31.10
61	UW	University of Washington	IMA Expansion	Yes	\$5,520,882	23.84	\$1,636,639	7.07	\$1,663,522	7.18	(\$114,294)	(0.49)	\$34,843	0.15	\$0	0.00	\$8,741,592	37.74
62	UW	University of Washington	Johnson Hall Renovation	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
63	UW	University of Washington	Law School Building	Yes	\$1,616,884	3.12	\$6,083,568	11.74	\$83,664	0.16	\$436,337	0.84	\$67,068	0.13	\$0	0.00	\$8,287,521	15.99
64	UW	University of Washington	Oceanography Research & Training	Yes	.	.	.	.	.	.	.	.	.	.	.	.	\$5,806,099	.
65	UW	University of Washington	Pacific Tower	Yes	.	.	.	.	.	.	.	.	.	.	.	.	\$1,496,426	6.77
66	UW	University of Washington	Surgery Pavilion	Yes	\$1,448,110	2.28	\$1,567,964	2.47	\$359,663	0.57	\$75,078	0.12	\$273,158	0.43	\$0	0.00	\$3,723,973	5.86
67	UW	University of Washington	Suzzallo Library Renovation	Yes	.	.	.	.	.	.	.	.	.	.	.	.	\$2,475,096	12.19
68	UW	University of Washington	Tacoma Branch Campus Phase 1A	Yes	\$1,928,276	8.81	\$402,680	1.84	\$677,866	3.10	\$0	0.00	\$0	0.00	\$2,397,764	10.95	\$5,406,586	24.69
70	UW	University of Washington	Tacoma Branch Campus Phase 2B	Yes	\$4,571,010	17.58	\$437,201	1.68	\$2,098,946	8.07	\$218,539	0.84	\$86,332	0.33	\$0	0.00	\$7,412,027	28.51
73	WSU	Washington State University	Biotechnology/ Life Sciences Facility (R	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
74	WSU	Washington State University	ELSB Vancouver	Yes	.	.	.	.	.	.	.	.	.	.	.	.	\$1,533,461	9.02
75	WSU	Washington State University	Energy Plan (Steam Plant Redevelopment)	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
76	WSU	Washington State University	Johnson Hall - Plant Biosciences Complex	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
78	WSU	Washington State University	Scholars Hall	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
77	WSU	Washington State University	School of Communication Addition (Morrow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
79	WSU	Washington State University	Spokane Academic Center	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
80	WSU	Washington State University	Spokane Health Sciences Bldg	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
81	WSU	Washington State University	Spokane Nursing Center	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
108	WSU	Washington State University	Student Recreation Center	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
82	WSU	Washington State University	Teaching and Learning Center	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
85	WSU	Washington State University	Tri-Cities Bio-Products Facility	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
83	WSU	Washington State University	Vancouver Multi-media Classroom Bldg	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
84	WSU	Washington State University	Vancouver Student Services	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

Response Count1081084637353636363636363636363635344844

Appendix H Contingency & Incentive Summary

2005 Survey Code	RCW Code	Agency Code	Project Name	Were there any contingency funds set aside on this project?	Owner's budgeted contingency	Owner's actual contingency	Who controlled the owner's contingency?	Owner's allocation percentage to owner	GCCM's budgeted contingency	GCCM's actual contingency	Who controlled the GC/CM's contingency?	GCCM's allocation percentage to owner	Were cost incentives utilized on this project (excluding buyout)?	Final incentive amount paid to GC/CM:	Total difference between budgeted and actual buyout.	Buyout savings allocated to Owner - percentage	Buyout savings allocated to GCCM - percentage
6	Cities	Bellevue	New City Building Redevelopment	Yes	\$3,706,665	.	Owner	100	\$1,561,315	.	Owner	100	No	.	.	.	.
12	Cities	Everett	Water Pollution Control Facility Phase A	Yes	.	.	.	.	\$1,618,827	.	GC/CM	5	Yes	.	.	.	.
88	Cities	Seattle	Aquarium, Pier 59 Renovations	Yes	.	.	.	.	.	.	.	.	.	.	.	.	.
41	Cities	Seattle	City Fire Station #10	Yes	\$2,138,358	.	Owner	.	\$1,580,625	.	GC/CM	.	.	.	.	.	.
31	Cities	Seattle	City Justice Center	Yes	\$1,390,469	\$2,980,273	Owner	100	\$3,015,787	\$3,015,787	GC/CM	100	No	.	\$3,296,505	0	100
11	Cities	Seattle	Landsburg Fish Passage & Diversion Facility	Yes	\$200,000	\$200,000	Owner	100	\$163,736	\$0	Owner	50	Yes	\$203,940	\$526,932	75	25
43	Cities	Seattle	McCaw Hall	Yes	\$8,891,182	\$10,182,657	Owner	87	\$0	\$1,472,384	GC/CM	13	Yes	\$0	\$0	.	.
109	Cities	Seattle	Park 90-5	.	.	.	.	.	.	.	.	.	.	.	.	.	.
95	Cities	Seattle	Police West Precinct Station and Community	.	.	.	.	.	.	.	.	.	.	.	\$0	.	.
32	Cities	Seattle	Seattle Central Library	Yes	\$0	\$0	.	.	\$3,000,000	\$3,000,000	GC/CM	70	Yes	\$450,000	\$1,258,000	70	30
30	Cities	Seattle	Seattle City Hall	Yes	\$2,535,160	\$3,291,798	Owner	100	\$2,373,260	\$2,373,260	GC/CM	.	No	.	\$57,937	0	100
111	Cities	Seattle Public Utilities	Cedar River Sockeye Hatchery Project	.	.	.	.	.	.	.	.	.	.	.	.	.	.
29	City PDA	Seattle-Chinatown International District	International District Village Square Ph	Yes	\$1,500,000	\$1,200,000	Owner	100	\$980,000	\$970,000	Owner	100	Yes	\$475,000	\$950,000	50	50
33	Counties	King County	King County Courthouse	.	.	.	.	.	.	.	.	.	.	.	.	.	.
34	Counties	King County	King County Jail	.	.	.	.	.	.	.	.	.	.	.	.	.	.
28	Counties	King County, Department of Natural Resource	Brightwater Treatment Facility	Yes	\$31,226,405	.	.	.	\$31,553,814	.	.	.	.	.	.	.	.
38	Counties	Pierce County	Adult Detention Facility Construction an	Yes	\$824,059	\$824,059	Owner	.	\$824,059	\$824,059	GC/CM	.	Yes	.	.	.	.
97	Counties	Snohomish County	Denney Juvenile Justice Center	.	.	.	.	.	.	.	.	.	.	.	\$0	.	.
98	Counties	Snohomish County	Snohomish County City Redevelopment	.	.	.	.	.	.	.	.	.	.	.	.	.	.
71	Ferries	Washington State Ferries	Anacortes Terminal Relocation	.	.	.	.	.	.	.	.	.	.	.	.	.	.
27	GA	GA	WA Sate Legislative Building Rehabilitation	Yes	\$8,700,000	.	Owner	.	\$2,909,911	.	GC/CM	5	Yes	\$0	.	100	0
15	GA	GA/Cascadia CC	UW-CCC Bothel Branch Campus Phase I & II	Yes	\$10,121,220	\$10,121,220	Owner	100	\$5,556,802	\$0	GC/CM	40	Yes	\$2,727,753	\$436,391	100	0
26	GA	GA/Department of Veterans Affairs	WA State Veterans Home	Yes	\$2,380,837	.	Owner	61	\$1,500,000	.	GC/CM	39	No	.	(\$1,250,000)	0	100
106	GA	GA/DOC	Airway Heights Corrections Center	Yes	.	.	.	.	.	.	.	.	No	.	.	.	.
10	GA	GA/DOC	Larch & Cedar Creek Corrections Centers	Yes	\$641,527	\$337,828	Owner	100	\$480,192	\$223,821	Owner	47	Yes	\$19,608	\$48,986	50	50
16	GA	GA/DOC	Monroe Close Custody Conversion & Repair	Yes	\$300,000	\$1,135,540	Owner	100	\$124,995	\$115,581	GC/CM	7.5	Yes	\$0	.	.	.
17	GA	GA/DOC	Special Offender Unit--Expand to 400 bed	Yes	\$2,012,000	\$571,834	Owner	100	\$1,331,300	\$945,568	GC/CM	29	No	.	.	100	0
18	GA	GA/DOC	Stafford Creek Corrections Center, Phase	Yes	\$5,312,111	\$4,788,445	Owner	100	\$4,516,611	(\$124,290)	GC/CM	0	No	.	\$0	100	0
20	GA	GA/DOC	Washington State Reformatory - 400 Bed A	Yes	\$1,141,177	\$173,215	Owner	100	\$562,647	\$341,183	GC/CM	39	Yes	\$221,464	.	.	.
8	GA	GA/DOC	WCC 97-99 Correctional Industries & Mast	Yes	\$280,768	\$311,562	Owner	.	\$162,322	\$85,462	GC/CM	.	No	.	.	.	.
72	GA	GA/DOC	WCCW Mental Health & Recep.	Yes	\$626,632	\$506,872	Owner	100	\$613,635	\$14,150	GC/CM	100	No	.	\$494,448	100	0
19	GA	GA/DOC	WCCW Replace G Units with 256 Bed Housing	Yes	\$668,560	\$258,164	Owner	65	\$369,540	\$179,322	GC/CM	51	Yes	\$190,217	.	100	0
22	GA	GA/Everett CC	Glacier/Pilchuck & Monte Cristo - Arts &	Yes	.	.	.	.	.	.	.	.	No	.	.	.	.
23	GA	GA/Everett CC	Undergraduate Education Center	.	.	.	.	.	.	.	.	.	.	.	.	.	.
24	GA	GA/Highline CC	HCC/CWU Higher Education Center	Yes	\$786,700	\$670,000	Owner	100	\$564,000	\$460,000	Owner	100	No	.	\$1,429,000	100	0
25	GA	GA/South Puget Sound	Science Complex Addition	.	.	.	.	.	.	.	.	.	.	.	.	.	.
86	GA	GA-BCC	Robinswood School Replacement (Bldg R)	Yes	.	.	Owner	5	.	.	GC/CM	5	Yes	\$125,000	.	50	50
110	GA	GA-DOC	Washington Corrections Center for Women	.	.	.	.	.	.	.	.	.	No	.	\$928,658	100	0
21	GA	GA-DSHS	Special Commitment Center Construction	Yes	\$1,900,000	\$2,028,298	Owner	5	\$1,900,000	\$1,888,308	Owner	5	No	.	\$0	.	.
46	Hospitals	Skagit Valley Public Hospital District #	Island Hospital	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Hospitals	Skagit Valley Public Hospital District N	Skagit Valley Hospital	Yes	\$2,456,788	.	Owner	100	\$3,579,000	.	GC/CM	100	Yes	.	.	.	.
2	K-12 Schools	Aberdeen School District	Aberdeen High School	Yes	\$4,280,000	.	Owner	.	.	.	.	.	.	.	.	.	.
7	K-12 Schools	Eastmont School District	Eastmont Middle School	Yes	\$0	\$97,664	Owner	100	\$517,452	\$352,036	GC/CM	75	No	\$100,000	\$604,218	67	33
13	K-12 Schools	Evergreen School District	Evergreen High School	.	.	.	.	.	.	.	.	.	.	.	.	.	.
92	K-12 Schools	Griffin School District #324	Elementary/Middle School	Yes	\$1,800,000	\$2,300,000	Owner	20	\$100,000	\$100,000	GC/CM	1	No	.	\$0	.	.
35	K-12 Schools	Lake Washington School District	Mann Elementary School	Yes	\$707,200	\$707,200	Owner	100	\$296,431	\$296,431	Owner	60	Yes	\$0	\$27,000	0	100
36	K-12 Schools	Northshore School District	Bothell High School, Phase 2	Yes	\$758,692	.	Owner	.	\$352,207	.	Owner	.	Yes	.	\$1,486,463	0	0
37	K-12 Schools	Northshore School District	Northshore Junior High School	Yes	\$1,520,000	\$1,043,202	Owner	100	\$409,636	\$93,634	GC/CM	33	Yes	\$0	\$188,489	100	0
99	K-12 Schools	Olympia School District	New Capital High School	.	.	.	.	.	.	.	.	.	.	.	.	.	.
100	K-12 Schools	Seattle School District	Cleveland High School	Yes	\$1,750,000	.	wner's CM Co	.	\$1,750,000	.	her's CM Consu	.	Yes	.	.	50	50
44	K-12 Schools	Seattle School District	Garfield High School	Yes	\$2,544,622	.	.	.	.	.	.	.	.	.	.	.	.
45	K-12 Schools	Seattle School District	Nathan Hale High School	Yes	\$304,561	.	Owner	100	\$166,277	.	GC/CM	75	No	.	\$125,681	.	.
101	K-12 Schools	Seattle School District	Roosevelt High School	Yes	\$1,297,697	.	Owner	.	\$1,322,746	.	Owner	.	Yes	\$15,000	(\$6,000,000)	.	.
94	K-12 Schools	Spokane School District	Rogers High School	.	.	.	.	.	.	.	.	.	.	.	.	.	.
93	K-12 Schools	Spokane School District	Shadle Park High School	.	.	.	.	.	.	.	.	.	.	.	.	.	.
49	K-12 Schools	Tacoma School District	Lincoln High School	Yes	\$2,467,944	.	Owner	100	.	.	.	.	No	.	.	.	.

Appendix H Contingency & Incentive Summary - continued

2005 Survey Code	RCW Code	Agency Code	Project Name	Were there any contingency funds set aside on this project?	Owner's budgeted contingency	Owner's actual contingency	Who controlled the owner's contingency?	Owner's allocation percentage to owner	GCCM's budgeted contingency	GCCM's actual contingency	Who controlled the GC/CM's contingency?	GCCM's allocation percentage to owner	Were cost incentives utilized on this project (excluding buyout)?	Final incentive amount paid to GC/CM:	Total difference between budgeted and actual buyout.	Buyout savings allocated to Owner - percentage	Buyout savings allocated to GCCM - percentage		
1	K-12 Schools	Tacoma School District #10	Stadium High School Modernization and Ad	Yes	\$1,254,089	.	Owner	.	\$2,768,188	.	Owner	.	No	.	.	.	.		
4	K-12 Schools	Wahluke School District	Wahluke High School	Yes	\$200,000	.	Owner	1.5	\$732,845	.	GC/CM	50	Yes	.	\$1,364,732	100	0		
104	Other	Pierce Transit	Pierce Transit - Maintenance Facility Up	.	.	.	.	.	.	.	.	.	.	.	.	.	.		
105	Other	Pierce Transit	Pierce Transit - Tacoma Dome Station Par	.	.	.	.	.	.	.	.	.	.	.	.	.	.		
90	Other	Seattle Housing Authority	NewHolly Hope VI Redev. Ph 1	Yes	\$0	\$0	Owner	100	\$2,537,225	\$1,857,159	Owner	27	No	.	.	.	.		
89	Other	Seattle Public Housing Authority	High Point Hope VI Redev. Ph 1	Yes	\$800,000	.	Owner	100	\$0	.	.	.	Yes	.	.	.	.		
47	Other	Seattle Public Housing Authority	NewHolly Ph. 2	Yes	\$290,743	\$0	Owner	100	.	.	.	.	No	.	.	.	.		
48	Other	Seattle Public Housing Authority	NewHolly Ph. 3	Yes	\$85,229	\$85,229	Owner	100	\$0	\$0	GC/CM	0	No	.	.	.	.		
91	Other	Seattle Public Housing Authority	Rainier Vista Hope VI Redev. Ph 1	Yes	\$1,400,000	.	Owner	100	.	.	.	.	No	.	.	.	.		
9	PFD	Clark County Public Facilities District	Exhibition Center	Yes	\$628,814	.	Owner	.	\$627,025	.	GC/CM	.	No	.	.	.	.		
102	PFD	Edmonds PFD	Center for the Arts	.	.	.	.	.	.	.	.	.	.	.	.	.	.		
87	PFD	OT Spokane PFD	Spokane Convention Center Expansion	Yes	\$229,733	.	Owner	.	\$2,042,206	.	Owner	.	No	.	.	.	.		
96	PFD	Pierce County	Convention Center	.	.	.	.	.	.	.	.	.	.	.	.	.	.		
103	PFD	Seattle PFD	WA Baseball Stadium SAFECO Field	.	.	.	.	.	.	.	.	.	.	.	.	.	.		
5	PFD	Skagit Regional Public Facilities District	McIntyre Hall, Performing Arts and Conference	Yes	\$700,000	\$650,000	Owner	80	\$314,700	\$260,000	Owner	20	Yes	\$10,000	\$0	.	.		
40	Ports	Port of Seattle	C1 Baggage Facility	Yes	\$10,694,000	.	Owner	.	\$16,394,000	.	Owner	100	No	.	.	.	.		
39	Ports	Port of Seattle	SeaTac Parking Garage	Yes	\$1,330,141	\$1,330,141	Owner	100	\$1,218,957	\$1,220,337	Owner	0	Yes	\$0	\$1,016,775	100	0		
42	Ports	Port of Seattle	Shilshole Marina Redevelopment	Yes	\$3,606,000	.	.	.	\$883,824	.	.	.	No	.	.	.	.		
107	Ports	Port of Seattle	World Trade Center	.	.	.	.	.	.	.	.	.	.	.	.	.	.		
50	UW	University of Washington	Architecture Hall Renovation	Yes	\$2,424,315	.	Owner	.	\$318,916	.	Owner	.	No	.	.	.	.		
51	UW	University of Washington	Bioengineering-Genome Sciences Bldg	Yes	\$10,236,788	.	Owner	100	\$2,200,000	.	Owner	100	Yes	.	.	100	0		
53	UW	University of Washington	Cascade Tower Renovation	Yes	\$1,171,430	\$772,423	Owner	.	\$431,426	\$550,000	Owner	.	Yes	\$83,000	\$699,415	100	0		
54	UW	University of Washington	Conibear Shellhouse	Yes	\$1,464,565	.	Owner	.	\$197,000	.	Owner	.	No	.	\$245,463	.	.		
55	UW	University of Washington	Dempsey Indoor Practice Facility	Yes	\$2,000,000	\$750,000	Owner	.	\$1,400,000	\$0	GC/CM	.	Yes	\$100,000	.	.	.		
56	UW	University of Washington	EE/CSE Phase 2 Expansion	Yes	\$2,035,880	\$2,035,880	Owner	100	\$2,325,176	\$2,278,950	Owner	50	Yes	.	\$1,329,649	65	35		
57	UW	University of Washington	Guggenheim Hall Renovation	Yes	\$2,845,781	.	Owner	100	\$402,142	.	Owner	100	.	.	.	.	.		
58	UW	University of Washington	Harborview Bond Program	Yes	\$25,266,111	.	Owner	100	.	.	.	.	.	.	.	.	.		
59	UW	University of Washington	Harborview Research & Training Facility	Yes	.	.	.	.	.	.	.	.	.	.	.	.	.		
60	UW	University of Washington	Hec Ed Pavilion Renovation	Yes	\$2,770,167	\$2,770,167	Owner	100	\$740,280	\$740,280	Owner	100	Yes	.	\$963,596	.	.		
61	UW	University of Washington	IMA Expansion	Yes	\$2,138,262	\$5,649,713	Owner	100	\$1,025,187	\$916,730	Owner	100	No	.	\$3,195,860	100	0		
62	UW	University of Washington	Johnson Hall Renovation	Yes	\$5,413,691	.	.	.	\$642,656	.	.	.	No	.	\$205,376	100	0		
63	UW	University of Washington	Law School Building	Yes	\$3,538,151	\$3,538,151	Owner	100	\$1,674,246	\$1,674,246	Owner	0	Yes	\$144,425	\$3,386,412	100	0		
64	UW	University of Washington	Oceanography Research & Training	Yes	.	.	Owner	.	\$4,969,384	.	Owner	.	.	.	.	.	.		
65	UW	University of Washington	Pacific Tower	Yes	\$1,906,406	\$1,496,426	Owner	100	\$583,027	\$583,027	Owner	100	No	\$100,000	\$2,424,289	100	0		
66	UW	University of Washington	Surgery Pavilion	Yes	\$5,190,159	\$0	Owner	100	\$7,593,530	\$7,593,530	Owner	100	Yes	\$0	\$4,935,000	100	0		
67	UW	University of Washington	Suzzallo Library Renovation	Yes	\$2,354,260	\$2,354,260	Owner	100	\$1,077,548	\$1,077,548	Owner	100	No	.	\$1,234,288	100	0		
68	UW	University of Washington	Tacoma Branch Campus Phase 1A	Yes	\$3,393,243	\$3,393,243	.	.	.	.	.	.	.	.	.	.	.		
70	UW	University of Washington	Tacoma Branch Campus Phase 2B	No	\$3,017,059	\$5,638,244	Owner	100	\$500,000	\$500,000	Owner	100	No	.	\$366,326	.	.		
73	WSU	Washington State University	Biotechnology/ Life Sciences Facility (R	.	.	.	.	.	.	.	.	.	.	.	.	.	.		
74	WSU	Washington State University	ELSB Vancouver	Yes	\$1,914,064	\$1,533,461	Owner	100	\$1,198,771	\$1,067,383	GC/CM	11	Yes	\$100,000	.	.	.		
75	WSU	Washington State University	Energy Plan (Steam Plant Redevelopment)	Yes	\$1,500,000	\$2,548,408	Owner	100	.	.	.	.	No	.	.	.	.		
76	WSU	Washington State University	Johnson Hall - Plant Biosciences Complex	Yes	\$1,895,154	\$987,664	Owner	100	.	.	.	.	No	.	.	.	.		
78	WSU	Washington State University	Scholars Hall	Yes	\$884,700	\$906,993	Owner	100	\$1,026,714	\$480,912	Owner	100	Yes	\$150,000	.	.	.		
77	WSU	Washington State University	School of Communication Addition (Morrow	Yes	\$317,224	\$359,901	Owner	100	.	.	.	.	No	.	.	.	.		
79	WSU	Washington State University	Spokane Academic Center	Yes	\$943,690	.	Owner	.	.	.	GC/CM	.	.	.	.	.	.		
80	WSU	Washington State University	Spokane Health Sciences Bldg	Yes	\$2,031,900	\$1,102,371	Owner	100	\$1,595,187	\$1,595,187	Owner	100	No	.	.	.	.		
81	WSU	Washington State University	Spokane Nursing Center	.	.	.	.	.	.	.	.	.	.	.	.	.	.		
108	WSU	Washington State University	Student Recreation Center	.	.	.	.	.	.	.	.	.	.	.	.	.	.		
82	WSU	Washington State University	Teaching and Learning Center	Yes	\$1,655,583	\$1,655,583	Owner	100	\$1,272,945	\$1,272,945	Owner	100	No	\$325,000	.	.	.		
85	WSU	Washington State University	Tri-Cities Bio-Products Facility	.	.	.	.	.	.	.	.	.	.	.	.	.	.		
83	WSU	Washington State University	Vancouver Multi-media Classroom Bldg	Yes	\$707,000	\$707,000	Owner	100	.	.	.	.	Yes	\$40,000	.	.	.		
84	WSU	Washington State University	Vancouver Student Services	.	.	.	.	.	.	.	.	.	.	.	.	.	.		
Response Count				108	108	81	74	46	70	52	63	41	62	46	71	26	37	32	32

Appendix I GC/CM Selection Summary

2005 Survey Code	RCW Code	Agency	Project Name	Year GCCM Approved	GC/CM Selected	Total number of firms competing in the GC/CM selection process?	Name of unsuccessful firm 1:	Name of unsuccessful firm 2:	Name of unsuccessful firm 3:
6	Cities	Bellevue	New City Building Redevelopment	2003	Lease Crutcher Lewis	7	Turner Construction Company	Sellen Construction	Hoffman Construction Company
12	Cities	Everett	Water Pollution Control Facility Phase A	1993	Hoffman Construction Company	5	M.A. Mortenson Company	CH2MHILL Constructors, Inc	MWH Constructors, Inc with Pease & Sons
88	Cities	Seattle	Aquarium, Pier 59 Renovations	2004	Turner Construction Company	3	Hoffman Construction Company	Howard S. Wright Construction Company	
41	Cities	Seattle	City Fire Station #10	2004	Hoffman Construction Company	7	W. G. Clark	Howard S. Wright Construction Company	Turner Construction Company
31	Cities	Seattle	City Justice Center	1999	Hoffman Construction Company	4	Dick Corporation	M.A. Mortenson Company	Turner Construction Company
11	Cities	Seattle	Landsburg Fish Passage & Diversion Facility	2000	Matt McDougall Company	5	Atkinson Construction	McClure and Sons, Inc.	Dillingham Construction
43	Cities	Seattle	McCaw Hall	2000	Baugh Skanska	5	Bayley Construction	Hoffman Construction Company	Kiewit Construction
109	Cities	Seattle	Park 90-5	.	Turner Construction Company	.			
95	Cities	Seattle	Police West Precinct Station and Community	1996	M.A. Mortenson Company	6	Absher Construction Company	The Austin Company	ECI General Contractors
32	Cities	Seattle	Seattle Central Library	1999	Hoffman Construalction Company	4	Lease Crutcher Lewis	Turner Construction Company	PCL Construction Services
30	Cities	Seattle	Seattle City Hall	1999	Hoffman Construction Company	4	Dick Corporation	M.A. Mortenson Company	Turner Construction Company
111	Cities	Seattle Public Utilities	Cedar River Sockeye Hatchery Project	2003	CH2M Hill Construction	2	Matt McDougall Inc.		
29	City PDA	Seattle-Chinatown International District	International District Village Square Ph	2000	Marpac Construction LLC	2	W. G. Clark		
33	Counties	King County	King County Courthouse	.	Baugh Skanska	1			
34	Counties	King County	King County Jail	.	Turner Construction Company	1			
28	Counties	King County, Department of Natural Resource	Brightwater Treatment Facility	2003	Hoffman Construction Company	4	M.A. Mortenson Company	Kiewitt Construction Company	Walsh Construction
38	Counties	Pierce County	Adult Detention Facility Construction an	1996	Absher Kitchell JV	6	Hoffman Construction Company	M.A. Mortenson Company	Turner Construction Company
97	Counties	Snohomish County	Denney Juvenile Justice Center	1996	M.A. Mortenson Company	5	Absher Construction Company	Turner Construction Company	Lydig Construction
98	Counties	Snohomish County	Snohomish County City Redevelopment	.	M.A. Mortenson Company	.			
71	Ferries	Washington State Ferries	Anacortes Terminal Relocation	2004	TBD	.			
27	GA	GA	WA Sate Legislative Building Rehabilitation	2000	M.A. Mortenson Company	7	Turner Construction Company	Bayley Construction	Absher Construction Company
15	GA	GA/Cascadia CC	UW-CCC Bothel Branch Campus Phase I & II	1997	M.A. Mortenson Company	.	PCL/Heery	Hoffman Construction Company	Turner/URS
26	GA	GA/Department of Veterans Affairs	WA State Veterans Home	2002	M.A. Mortenson Company	3	DPR Construction	JE Dunn Construction	Berschauer Phillips
106	GA	GA/DOC	Airway Heights Corrections Center	1991	Kitchell Contractors	4	Walsh	Howard S. Wright Construction Company	Blount
10	GA	GA/DOC	Larch & Cedar Creek Corrections Centers	1995	Absher Construction	5	Ellis-Don	McCarthy (SDL)	M.A. Mortenson Company
16	GA	GA/DOC	Monroe Close Custody Conversion & Repair	1997	Hoffman Construction Company	10	M.A. Mortenson Company	Absher/Kitchell	
17	GA	GA/DOC	Special Offender Unit--Expand to 400 bed	1996	Hoffman Construction Company	6	Absher/Kitchell	M.A. Mortenson Company	Swinerton, Westwood
18	GA	GA/DOC	Stafford Creek Corrections Center, Phase	1995	Fluor Daniel	8	Lydig Construction	Dick Enterprises/Cree Const	Hensel Phelps Const Co
20	GA	GA/DOC	Washington State Reformatory - 400 Bed A	1995	Absher Construction	3	Roebbelen Construction	Fluor Daniel	Ellis-Don
8	GA	GA/DOC	WCC 97-99 Correctional Industries & Mast	1997	Absher Construction	7	Swinerton, Westwood	Hilger - Stewart	Bodenhamer Const. Co.
72	GA	GA/DOC	WCCW Mental Health & Recep.	1997	M.A. Mortenson Company	9	Absher Construction Company	McCarthy (SDL)	Heery International
19	GA	GA/DOC	WCCW Replace G Units with 256 Bed Housing	1995	M.A. Mortenson Company	9	Roebbelen Construction	Fluor Daniel	Ellis-Don
22	GA	GA/Everett CC	Glacier/Pilchuck & Monte Cristo - Arts &	2004	M.A. Mortenson Company	4	Turner Construction Company	Howard S. Wright Construction Company	Lydig Construction
23	GA	GA/Everett CC	Undergraduate Education Center	.	TBD	6			
24	GA	GA/Highline CC	HCC/CWU Higher Education Center	2001	M.A. Mortenson Company	10	Howard S. Wright Construction Company	Skanska (Baugh)	Lease Crutcher Lewis
25	GA	GA/South Puget Sound	Science Complex Addition	.	TBD	6			
86	GA	GA-BCC	Robinswood School Replacement (Bldg R)	1999	M.A. Mortenson Company	.	Skanska (Baugh)	Gilbane Building Company	Hoffman Construction Company
110	GA	GA-DOC	Washington Corrections Center for Women	1991	Kitchell Contractors	9			
21	GA	GA-DSHS	Special Commitment Center Construction	2000	Absher Kitchell JV	.	M.A. Mortenson Company	Drake Construction	
46	Hospitals	Skagit Valley Public Hospital District #	Island Hospital	2005	TBD	.			
3	Hospitals	Skagit Valley Public Hospital District N	Skagit Valley Hospital	2004	Hoffman Construction Company	4	M.A. Mortenson Company	JE Dunn Construction	Howard S. Wright Construction Company
2	K-12 School	Aberdeen School District	Aberdeen High School	2004	Absher Construction	4	Lydig Construction	Garcon Construction	Bayley Construction
7	K-12 School	Eastmont School District	Eastmont Middle School	2003	Lydig Construction	7	Absher Construction Company	Garcon Construction	Kirtley Cole Associates
13	K-12 School	Evergreen School District	Evergreen High School	.	Robinson Construction	3	Emerick Construction	Todd Construction	
92	K-12 School	Griffin School District #324	Elementary/Middle School	2003	John Korsmo Construction	3	Berschauer Phillips	Lease Crutcher Lewis	
35	K-12 School	Lake Washington School District	Mann Elementary School	2000	Kirtley Cole Construction	11	Absher Construction Company	Bayley Construction	Finn Construction
36	K-12 School	Northshore School District	Bothell High School, Phase 2	2003	Lease Crutcher Lewis	4	M.A. Mortenson Company	Absher Construction Company	CDK
37	K-12 School	Northshore School District	Northshore Junior High School	2001	Baugh Skanska	6	Lease Crutcher Lewis	Absher Construction Company	CDK
99	K-12 School	Olympia School District	New Capital High School	.	Robinson Construction	.			
100	K-12 School	Seattle School District	Cleveland High School	2005	Absher Construction	3	Hoffman Construction Company	Lease Cruther Lewis	
44	K-12 School	Seattle School District	Garfield High School	2003	Lease Crutcher Lewis	5	Absher Construction Company	Hoffman Construction Company	Lydig Construction
45	K-12 School	Seattle School District	Nathan Hale High School	2002	Sellen Construction	6	Bayley Construction	Absher Construction Company	Rain
101	K-12 School	Seattle School District	Roosevelt High School	2002	Hoffman Construction Company	.	Sellen Construction	Lydig Construction	Lease Crutcher Lewis
94	K-12 School	Spokane School District	Rogers High School	2003	TBD	.			
93	K-12 School	Spokane School District	Shadle Park High School	.	TBD	.			
49	K-12 School	Tacoma School District	Lincoln High School	2003	Lease Crutcher Lewis	7	Turner Construction Company	Howard S. Wright Construction Company	Absher Construction Company
1	K-12 School	Tacoma School District #10	Stadium High School Modernization and Ad	2000	Skanska USA Building Inc.	5	Lease Crutcher Lewis	Kiewitt Construction Company	Absher Construction Company
4	K-12 School	Wahluke School District	Wahluke High School	2003	Walker Construction, Inc.	9	Lydig Construction	Leone Keeble Gen. Contractors	Swinerton Builders
104	Other	Pierce Transit	Pierce Transit - Maintenance Facility Up	.	Absher Construction	.			
105	Other	Pierce Transit	Pierce Transit - Tacoma Dome Station Par	.	Absher Construction	.			
90	Other	Seattle Housing Authority	NewHolly Hope VI Redev. Ph 1	1996	Absher-Pacific	2	Wallace Roberts Todd		
89	Other	Seattle Public Housing Authority	High Point Hope VI Redev. Ph 1	2003	Absher Construction	2	GLY/Walsh Washington		
47	Other	Seattle Public Housing Authority	NewHolly Ph. 2	1999	Walsh Construction Company	2	Absher Construction Company		
48	Other	Seattle Public Housing Authority	NewHolly Ph. 3	2000	Walsh Construction Company	3	Absher Construction Company	Sellen Construction	
91	Other	Seattle Public Housing Authority	Rainier Vista Hope VI Redev. Ph 1	2000	Walsh Construction Company	4	Absher Construction Company	WG Clark	GLY
9	PFD	Clark County Public Facilities District	Exhibition Center	2004	Hoffman Construction Company	5			
102	PFD	Edmonds PFD	Center for the Arts	.	Sellen Construction	.			
87	PFD	OT Spokane PFD	Spokane Convention Center Expansion	2003	Hoffman-Bouten JV	4	Garco-KJM JV	Lydig Construction	Turner Construction Company
96	PFD	Pierce County	Convention Center	.	M.A. Mortenson Company	.			
103	PFD	Seattle PFD	WA Baseball Stadium SAFECO Field	1996	Hunt/Kiewit	3	Mortenson/Lease Cruther	PCL	
5	PFD	Skagit Regional Public Facilities District	McIntyre Hall, Performing Arts and Conference	2002	Skanska USA Building Inc.	6	Turner Construction Company	Sellen Construction	Fisher & Sons

Appendix I GC/CM Selection Summary – continued

2005 Survey Code	RCW Code	Agency	Project Name	Name of unsuccessful firm 4:	Name of unsuccessful firm 5:	Name of unsuccessful firm 6:	Name of unsuccessful firm 7:	Name of unsuccessful firm 8:	Name of unsuccessful firm 9:	Name of unsuccessful firm 10:
6	Cities	Bellevue	New City Building Redevelopment	Absher Construction Company	Skanska (Baugh)	JE Dunn				
12	Cities	Everett	Water Pollution Control Facility Phase A	RCI Construction Group						
88	Cities	Seattle	Aquarium, Pier 59 Renovations							
41	Cities	Seattle	City Fire Station #10	M.A. Mortenson Company	Absher Construction	Skanska (Baugh)				
31	Cities	Seattle	City Justice Center							
11	Cities	Seattle	Landsburg Fish Passage & Diversion Facility	Harza / Goodfellow Bros., inc. (join						
43	Cities	Seattle	McCaw Hall	PCL Construction						
109	Cities	Seattle	Park 90-5							
95	Cities	Seattle	Police West Precinct Station and Community	WG Clark						
32	Cities	Seattle	Seattle Central Library							
30	Cities	Seattle	Seattle City Hall							
111	Cities	Seattle Public Utilities	Cedar River Sockeye Hatchery Project							
29	City PDA	Seattle-Chinatown International District	International District Village Square Ph							
33	Counties	King County	King County Courthouse							
34	Counties	King County	King County Jail							
28	Counties	King County, Department of Natural Resource	Brightwater Treatment Facility							
38	Counties	Pierce County	Adult Detention Facility Construction an	Fluor Daniel/Vanir	McCarthy (SDL)					
97	Counties	Snohomish County	Denney Juvenile Justice Center	Hensel Phelps						
98	Counties	Snohomish County	Snohomish County City Redevelopment							
71	Ferries	Washington State Ferries	Anacortes Terminal Relocation							
27	GA	GA	WA Sate Legislative Building Rehabilitation							
15	GA	GA/Cascadia CC	UW -CCC Bothel Branch Campus Phase I & II	Skanska (Baugh)						
26	GA	GA/Department of Veterans Affairs	WA State Veterans Home	Walsh Construction	Turner Construction Company	Hoffman Construction Company	Absher Kitchell	Skanska (Baugh)	Lease Crutcher Lewis	
106	GA	GA/DOC	Airway Heights Corrections Center	JA Jones	Swinerton & Wallberg					
10	GA	GA/DOC	Larch & Cedar Creek Corrections Centers	Vemo Co.	John L. Price, Inc	Anderson Construction	Metcalf Grim	Emerick		
16	GA	GA/DOC	Monroe Close Custody Conversion & Repair							
17	GA	GA/DOC	Special Offender Unit--Expand to 400 bed	McCarthy (SDL)	Morse Diesel International	Heery International				
18	GA	GA/DOC	Stafford Creek Corrections Center, Phase	M.A. Mortenson Company	CRSS Constructors	PCL/Heery	Drake/Dunn	Kiewit		
20	GA	GA/DOC	Washington State Reformatory - 400 Bed A	Kitchell	Cree	Vemo Co.	Lydig Construction	M.A. Mortenson Company		
8	GA	GA/DOC	WCC 97-99 Correctional Industries & Mast							
72	GA	GA/DOC	WCCW Mental Health & Recep.	Bodenhamer	Swinerton, Westwood					
19	GA	GA/DOC	WCCW Replace G Units with 256 Bed Housing	Kitchell	Cree	Wade Perrow	Absher Construction	Vemo Co.	Lydig Construction	
22	GA	GA/Everett CC	Glacier/Pilchuck & Monte Cristo - Arts &	Absher Construction Company	Bayley Construction					
23	GA	GA/Everett CC	Undergraduate Education Center							
24	GA	GA/Highline CC	HCC/CWU Higher Education Center	John Korsmo Construction Co	Bayley Construction	Lydig Construction	Absher Construction			
25	GA	GA/South Puget Sound	Science Complex Addition							
86	GA	GA-BCC	Robinswood School Replacement (Bldg R)	Lease Crutcher Lewis	Lydig Construction	Turner Construction Company				
110	GA	GA-DOC	Washington Corrections Center for Women							
21	GA	GA-DSHS	Special Commitment Center Construction							
46	Hospitals	Skagit Valley Public Hospital District #	Island Hospital							
3	Hospitals	Skagit Valley Public Hospital District N	Skagit Valley Hospital							
2	K-12 School	Aberdeen School District	Aberdeen High School							
7	K-12 School	Eastmont School District	Eastmont Middle School	Bayley Construction	Kiewit Construction					
13	K-12 School	Evergreen School District	Evergreen High School							
92	K-12 School	Griffin School District #324	Elementary/Middle School							
35	K-12 School	Lake Washington School District	Mann Elementary School	Skanska (Baugh)	Heery	Berschauer Phillips Construction	Crownover Construction	Lease Lewis Construction	Rafn Construction	Vemo Construction
36	K-12 School	Northshore School District	Bothell High School, Phase 2							
37	K-12 School	Northshore School District	Northshore Junior High School	Bayley Construction	Hoffman Construction Company					
99	K-12 School	Olympia School District	New Capital High School							
100	K-12 School	Seattle School District	Cleveland High School							
44	K-12 School	Seattle School District	Garfield High School	Turner Construction Company						
45	K-12 School	Seattle School District	Nathan Hale High School	Lydig Construction	Kirtley Cole	Graham (Shea)	CDK Construction Services			
101	K-12 School	Seattle School District	Roosevelt High School	Skanska (Baugh)	Turner Construction Company	Bayley Construction				
94	K-12 School	Spokane School District	Rogers High School							
93	K-12 School	Spokane School District	Shadle Park High School							
49	K-12 School	Tacoma School District	Lincoln High School	Bayley Construction	M.A. Mortenson Company	Soltec Pacific				
1	K-12 School	Tacoma School District #10	Stadium High School Modernization and Ad	Sellen Construction						
4	K-12 School	Wahluke School District	Wahluke High School	M.A. Mortenson Company	Absher Construction	Graham (Shea)	Garcon Construction	Bouten Construction Company		
104	Other	Pierce Transit	Pierce Transit - Maintenance Facility Up							
105	Other	Pierce Transit	Pierce Transit - Tacoma Dome Station Par							
90	Other	Seattle Housing Authority	NewHolly Hope VI Redev. Ph 1							
89	Other	Seattle Public Housing Authority	High Point Hope VI Redev. Ph 1							
47	Other	Seattle Public Housing Authority	NewHolly Ph. 2							
48	Other	Seattle Public Housing Authority	NewHolly Ph. 3							
91	Other	Seattle Public Housing Authority	Rainer Vista Hope VI Redev. Ph 1							
9	PFD	Clark County Public Facilities District	Exhibition Center							
102	PFD	Edmonds PFD	Center for the Arts							
87	PFD	OT Spokane PFD	Spokane Convention Center Expansion							
96	PFD	Pierce County	Convention Center							
103	PFD	Seattle PFD	WA Baseball Stadium SAFECO Field							
5	PFD	Skagit Regional Public Facilities District	McIntyre Hall, Performing Arts and Conference							



Appendix I GC/CM Selection Summary – continued

2005 Survey Code	RCW Code	Agency	Project Name	Year GCCM Approved	GC/CM Selected	Total number of firms competing in the GC/CM selection process?	Name of unsuccessful firm 1:	Name of unsuccessful firm 2:	Name of unsuccessful firm 3:
40	Ports	Port of Seattle	C1 Baggage Facility	2003	Turner Construction Company	4	Hensel Phelp	Skanska (Baugh)	Siemens
39	Ports	Port of Seattle	SeaTac Parking Garage	1995	M.A. Mortenson Company	7	Turner Construction Company	Hoffman Construction Company	Bayley Construction
42	Ports	Port of Seattle	Shilshole Marina Redevelopment	2004	Hoffman Construction Company	2	Manson/Absher		
107	Ports	Port of Seattle	World Trade Center	1997	Turner Construction Company	.			
50	UW	University of Washington	Architecture Hall Renovation	2004	M.A. Mortenson Company	5	Turner Construction Company	Howard S. Wright Construction Company	Bayley Construction
51	UW	University of Washington	Bioengineering-Genome Sciences Bldg	2002	Hoffman Construction Company	3	Skanska (Baugh)	Turner Construction Company	
53	UW	University of Washington	Cascade Tower Renovation	1999	Hoffman Construction Company	9	Skanska (Baugh)	Absher Construction Company	DPR Construction
54	UW	University of Washington	Conibear Shellhouse	2001	Sellen Construction	10	Lease Crutcher Lewis	Skanska (Baugh)	M.A. Mortenson Company
55	UW	University of Washington	Dempsey Indoor Practice Facility	1998	Baugh Construction	3			
56	UW	University of Washington	EE/CSE Phase 2 Expansion	1999	M.A. Mortenson Company	5	Skanska (Baugh)	Hoffman Construction Company	Lease Crutcher Lewis
57	UW	University of Washington	Guggenheim Hall Renovation	2004	Skanska USA Building Inc.	7	Turner Construction Company	Hoffman Construction Company	M.A. Mortenson Company
58	UW	University of Washington	Harborview Bond Program	2002	Turner Construction Company	2	Skanska (Baugh)		
59	UW	University of Washington	Harborview Research & Training Facility	1994	Sellen Construction	.			
60	UW	University of Washington	Hec Ed Pavilion Renovation	1997	Sellen Construction	6	Skanska (Baugh)	Hoffman Construction Company	Morse-Diesel
61	UW	University of Washington	IMA Expansion	1998	Hoffman Construction Company	6	Skanska (Baugh)	Gilbane Building Company	DPR Construction
62	UW	University of Washington	Johnson Hall Renovation	2002	Skanska USA Building Inc.	7	Skanska (Baugh)	Bayley Construction	GLY
63	UW	University of Washington	Law School Building	1999	Lease Crutcher Lewis	7	Skanska (Baugh)	Bayley Construction	Hoffman Construction Company
64	UW	University of Washington	Oceanography Research & Training	1996	Turner Construction Company	.			
65	UW	University of Washington	Pacific Tower	1998	Baugh Skanska	4	Hoffman Construction Company	Lease Crutcher Lewis	M.A. Mortenson Company
66	UW	University of Washington	Surgery Pavilion	1999	Hoffman Construction Company	7	Skanska (Baugh)	Lease Crutcher Lewis	McCarthy (SDL)
67	UW	University of Washington	Suzzallo Library Renovation	1999	Turner Construction Company	8	Skanska (Baugh)	Ellis Don	GLY
68	UW	University of Washington	Tacoma Branch Campus Phase 1A	1995	McCarthy (SDL)	.			
70	UW	University of Washington	Tacoma Branch Campus Phase 2B	2001	Lease Crutcher Lewis	10	Absher Construction Company	Skanska (Baugh)	Bayley Construction
73	WSU	Washington State University	Biotechnology/ Life Sciences Facility (R	2004	Lydig Construction	5	Hoffman Construction Company	Graham (Shea)	Skanska (Baugh)
74	WSU	Washington State University	ELSB Vancouver	1997	Baugh Construction	9	DPR Construction	Gilbane Building Company	Lease Crutcher Lewis
75	WSU	Washington State University	Energy Plan (Steam Plant Redevelopment)	2002	Hoffman Construction Company	6	Skanska (Baugh)	DPR Construction	Garcon Construction
76	WSU	Washington State University	Johnson Hall - Plant Biosciences Complex	2001	Baugh Construction, Oregon	7	Absher Construction Company	Lease Crutcher Lewis	Turner Construction Company
78	WSU	Washington State University	Scholars Hall	1999	Baugh Construction, Oregon	5	Gilbane Building Company	Powell	Hoffman Construction Company
77	WSU	Washington State University	School of Communication Addition (Morrow	2002	Baugh Construction, Oregon	5	Graham (Shea)	Lydig Construction	DPR Construction
79	WSU	Washington State University	Spokane Academic Center	2001	Shea Graham Construction	8	Skanska (Baugh)	DPR Construction	McCarthy (SDL)
80	WSU	Washington State University	Spokane Health Sciences Bldg	1997	Shea Graham Construction	5	Hoffman Construction Company	Lydig Construction	Skanska (Baugh)
81	WSU	Washington State University	Spokane Nursing Center	2003	Shea Graham Construction	5	Bouten Construction	Lydig Construction	Leone Keeble Gen. Contractors
108	WSU	Washington State University	Student Recreation Center	.	Gilbane Building Company	.			
82	WSU	Washington State University	Teaching and Learning Center	1997	Lydig Construction	5	Skanska (Baugh)	Drake Construction	Gilbane Building Company
85	WSU	Washington State University	Tri-Cities Bio-Products Facility	2004	Bouten Construction Company	4	Skanska (Baugh)	Emerick Construction Company	Hoffman Construction Company
83	WSU	Washington State University	Vancouver Multi-media Classroom Bldg	1997	Baugh Construction	9	DPR Construction	Drake Construction	Gilbane Building Company
84	WSU	Washington State University	Vancouver Student Services	2002	Hoffman Construction Company	4	Skanska (Baugh)	Turner Construction Company	JE Dunn
Response Count		108	108	94	108	88	108	108	108

Appendix I GC/CM Selection Summary – continued

2005 Survey Code	RCW Code	Agency	Project Name	Name of unsuccessful firm 4:	Name of unsuccessful firm 5:	Name of unsuccessful firm 6:	Name of unsuccessful firm 7:	Name of unsuccessful firm 8:	Name of unsuccessful firm 9:	Name of unsuccessful firm 10:
40	Ports	Port of Seattle	C1 Baggage Facility							
39	Ports	Port of Seattle	SeaTac Parking Garage	Skanska (Baugh)	McCarthy (SDL)	Ledcor				
42	Ports	Port of Seattle	Shilshole Marina Redevelopment							
107	Ports	Port of Seattle	World Trade Center							
50	UW	University of Washington	Architecture Hall Renovation	Absher Construction Company						
51	UW	University of Washington	Bioengineering-Genome Sciences Bldg							
53	UW	University of Washington	Cascade Tower Renovation	Lease Crutcher Lewis	Vemo Co.	Turner Construction Company	Market Street Systems	M.A. Mortenson Company	Gilbane Building Company	
54	UW	University of Washington	Conibear Shellhouse	Bayley Construction	Absher Construction	GLY	McCarthy (SDL)	Rafn Construction	Turner Construction	WG Clark
55	UW	University of Washington	Dempsey Indoor Practice Facility							
56	UW	University of Washington	EE/CSE Phase 2 Expansion	Turner Construction Company						
57	UW	University of Washington	Guggenheim Hall Renovation	Bayley Construction	Howard S. Wright	John Korsmo Construction				
58	UW	University of Washington	Harborview Bond Program							
59	UW	University of Washington	Harborview Research & Training Facility							
60	UW	University of Washington	Hec Ed Pavilion Renovation	M.A. Mortenson Company	Turner Construction Company					
61	UW	University of Washington	IMA Expansion	M.A. Mortenson Company	Turner Construction Company					
62	UW	University of Washington	Johnson Hall Renovation	M.A. Mortenson Company	Sellen Construction	Turner Construction Company				
63	UW	University of Washington	Law School Building	McCarthy (SDL)	M.A. Mortenson Company	Sellen				
64	UW	University of Washington	Oceanography Research & Training							
65	UW	University of Washington	Pacific Tower							
66	UW	University of Washington	Surgery Pavilion	M.A. Mortenson Company	PCL	Turner Construction Company				
67	UW	University of Washington	Suzzallo Library Renovation	Hensel Phelps	Lease Crutcher Lewis	M.A. Mortenson Company				
68	UW	University of Washington	Tacoma Branch Campus Phase 1A							
70	UW	University of Washington	Tacoma Branch Campus Phase 2B	DPR Construction	GLY	McCarthy (SDL)	M.A. Mortenson Company	Hoffman	Turner Construction	
73	WSU	Washington State University	Biotechnology/ Life Sciences Facility (R	Turner Construction Company						
74	WSU	Washington State University	ELSB Vancouver	Robinson Construction	Drake Construction	Hoffman Construction	Nielsen Dillingham	Turner Construction		
75	WSU	Washington State University	Energy Plan (Steam Plant Redevelopment)	Lydig Construction	Graham (Shea)					
76	WSU	Washington State University	Johnson Hall - Plant Biosciences Complex	Hoffman Construction Co. Oregon	Lydig Construction	Walker - KJM Partnership				
78	WSU	Washington State University	Scholars Hall	Graham (Shea)						
77	WSU	Washington State University	School of Communication Addition (Morrow	Turner Construction Company						
79	WSU	Washington State University	Spokane Academic Center	Walker/KJM	Bayley Construction	Lydig Construction	Turner Construction Company			
80	WSU	Washington State University	Spokane Health Sciences Bldg	Gilbane Building Company						
81	WSU	Washington State University	Spokane Nursing Center	Turner Construction Company						
108	WSU	Washington State University	Student Recreation Center							
82	WSU	Washington State University	Teaching and Learning Center	Hoffman Construction Company						
85	WSU	Washington State University	Tri-Cities Bio-Products Facility							
83	WSU	Washington State University	Vancouver Multi-media Classroom Bldg	Hoffman Construction Company	Lease Crutcher Lewis	Nielsen Dillingham	Robinson Construction	Turner Construction Company		
84	WSU	Washington State University	Vancouver Student Services							
Response Count		108	108	108	108	108	108	108	108	108

Appendix J Subcontractor Selection Summary

2005 Survey Code	RCW Code	Agency Code	Project Name	Stage design was in at GC/CM selection	Percentage of design stage	Total number of firms competing in the GC/CM selection process?	Stage design was in at final (MACC) contract agreement:	Number of bid packages utilized on this project?	Was there a public notice for request for pre- qualifications?	Number of trades prequalified	Number of bid packages the GC/CM bid on?	Number of bid packages the GC/CM performed?	Total dollar volume of self- performed work	% of contract value	Did the GC/CM prequalify any subcontractors?	Total difference between budgeted and actual buyout.	Buyout savings allocated to Owner - percentage	Buyout savings allocated to GCCM - percentage
6	Cities	Bellevue	New City Building Redevelopment	Schematic Design	.	7	50%	23	Yes	5	1	0	\$0	0.00	Yes	.	.	.
12	Cities	Everett	Water Pollution Control Facility Phase A	Construction Documents	30	5	90%	.	.	.	.	.	.	.	.	.	.	.
88	Cities	Seattle	Aquarium, Pier 59 Renovations	Design Development	0	3	90%	.	.	.	.	.	.	.	.	.	.	.
41	Cities	Seattle	City Fire Station #10	Schematic Design	100	7	.	.	.	.	.	.	.	.	.	.	.	.
31	Cities	Seattle	City Justice Center	Schematic Design	100	4	80%	54	Yes	5	2	2	\$5,274,514	6.93	Yes	\$3,296,505	0	100
11	Cities	Seattle	Landsburg Fish Passage & Diversion Facility	Schematic Design	15	5	90%	52	Yes	4	12	9	\$2,430,000	25.12	Yes	\$526,932	75	25
43	Cities	Seattle	McCaw Hall	Schematic Design	30	5	60%	60	Yes	4	9	9	\$21,486,753	21.57	Yes	\$0	.	.
109	Cities	Seattle	Park 90-5	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
95	Cities	Seattle	Police West Precinct Station and Community	.	.	6	.	22	.	.	2	1	\$1,747,108	7.17	.	\$0	.	.
32	Cities	Seattle	Seattle Central Library	Schematic Design	50	4	70%	55	Yes	2	1	0	\$0	0.00	Yes	\$1,258,000	70	30
30	Cities	Seattle	Seattle City Hall	Schematic Design	100	4	80%	61	Yes	2	2	2	\$6,085,171	9.95	Yes	\$57,937	0	100
111	Cities	Seattle Public Utilities	Cedar River Sockeye Hatchery Project	Design Development	.	2	.	.	.	.	.	.	.	.	.	.	.	.
29	City PDA	Seattle-Chinatown International District	International District Village Square Ph	Design Development	.	2	100%	61	Yes	18	4	3	\$583,400	3.97	Yes	\$950,000	50	50
33	Counties	King County	King County Courthouse	.	.	1	.	.	.	.	.	.	.	.	.	.	.	.
34	Counties	King County	King County Jail	.	.	1	.	.	.	.	.	.	.	.	.	.	.	.
28	Counties	King County, Department of Natural Resource	Brightwater Treatment Facility	Design Development	30	4	90%	.	.	.	.	.	.	.	.	.	.	.
38	Counties	Pierce County	Adult Detention Facility Construction an	Schematic Design	90	6	80%	12	Yes	1	0	.	.	.	Yes	.	.	.
97	Counties	Snohomish County	Denney Juvenile Justice Center	.	.	5	.	5	.	.	.	.	.	.	.	\$0	.	.
98	Counties	Snohomish County	Snohomish County City Redevelopment	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
71	Ferries	Washington State Ferries	Anacortes Terminal Relocation	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
27	GA	GA	WA Sate Legislative Building Rehabilitation	Schematic Design	0	4	50%	23	Yes	10	4	3	\$10,688,441	15.88	Yes	.	100	0
15	GA	GA/Cascadia CC	UW-CCC Bothel Branch Campus Phase I & II	Schematic Design	30	5	50%	35	Yes	3	2	1	\$9,890,108	8.42	Yes	\$436,391	100	0
26	GA	GA/Department of Veterans Affairs	WA State Veterans Home	Project Feasibility	100	10	70%	18	.	.	1	1	\$6,180,000	18.37	No	(\$1,250,000)	0	100
106	GA	GA/DOC	Airway Heights Corrections Center	Schematic Design	.	6	70%	15	.	.	0	.	.	.	.	.	.	.
10	GA	GA/DOC	Larch & Cedar Creek Corrections Centers	Schematic Design	.	8	50%	12	.	.	.	.	.	.	No	\$48,986	50	50
16	GA	GA/DOC	Monroe Close Custody Conversion & Repair	Programming	100	3	50%	6	No	1	0	.	.	.	Yes	.	.	.
17	GA	GA/DOC	Special Offender Unit-Expand to 400 bed	Programming	0	7	50%	30	No	8	2	2	\$3,053,890	10.16	Yes	.	100	0
18	GA	GA/DOC	Stafford Creek Corrections Center, Phase	Schematic Design	10	9	50%	22	.	.	0	.	.	.	No	\$0	100	0
20	GA	GA/DOC	Washington State Reformatory - 400 Bed A	Programming	.	9	50%	6	No	1	0	.	.	.	Yes	.	.	.
8	GA	GA/DOC	WCC 97-99 Correctional Industries & Mast	Schematic Design	100	4	50%	7	.	.	0	.	.	.	No	.	.	.
72	GA	GA/DOC	WCCW Mental Health & Recep.	Schematic Design	.	6	80%	10	Yes	2	2	2	\$3,884,803	29.05	Yes	\$494,448	100	0
19	GA	GA/DOC	WCCW Replace G Units with 256 Bed Housing	Schematic Design	.	10	50%	7	.	.	0	.	.	.	No	.	100	0
22	GA	GA/Everett CC	Glacier/Pilchuck & Monte Cristo - Arts &	Schematic Design	75	6	.	.	.	.	.	.	.	.	.	.	.	.
23	GA	GA/Everett CC	Undergraduate Education Center	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
24	GA	GA/Highline CC	HCC/CWU Higher Education Center	Schematic Design	50	9	80%	14	Yes	6	3	2	\$4,674,200	23.77	Yes	\$1,429,000	100	0
25	GA	GA/South Puget Sound	Science Complex Addition	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
86	GA	GA-BCC	Robinswood School Replacement (Bldg R)	Design Development	20	7	80%	17	Yes	2	3	3	\$3,757,797	21.78	Yes	.	50	50
110	GA	GA-DOC	Washington Corrections Center for Women	.	.	.	.	16	.	.	.	.	.	.	.	\$928,658	100	0
21	GA	GA-DSHS	Special Commitment Center Construction	Schematic Design	100	3	100%	12	Yes	1	2	2	\$12,854,368	24.75	Yes	\$0	.	.
46	Hospitals	Skagit Valley Public Hospital District #	Island Hospital	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	Hospitals	Skagit Valley Public Hospital District N	Skagit Valley Hospital	Schematic Design	50	4	.	.	.	.	.	.	.	.	.	.	.	.
2	K-12 Schools	Aberdeen School District	Aberdeen High School	Schematic Design	100	4	.	.	.	.	.	.	.	.	.	.	.	.
7	K-12 Schools	Eastmont School District	Eastmont Middle School	Schematic Design	25	7	60%	36	Yes	14	5	5	\$1,082,082	7.82	Yes	\$604,218	67	33
13	K-12 Schools	Evergreen School District	Evergreen High School	.	.	3	.	.	.	.	.	.	.	.	.	.	.	.
92	K-12 Schools	Griffin School District #324	Elementary/Middle School	Design Development	30	3	70%	35	.	.	4	4	.	.	No	\$0	.	.
35	K-12 Schools	Lake Washington School District	Mann Elementary School	Design Development	75	11	90%	13	Yes	13	1	1	\$2,201,264	23.12	Yes	\$27,000	0	100
36	K-12 Schools	Northshore School District	Bothell High School, Phase 2	Schematic Design	70	4	70%	31	Yes	3	1	1	\$781,806	5.16	Yes	\$1,486,463	0	0
37	K-12 Schools	Northshore School District	Northshore Junior High School	Design Development	50	6	90%	30	Yes	6	4	3	\$2,713,773	14.05	Yes	\$188,489	100	0
99	K-12 Schools	Olympia School District	New Capital High School	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
100	K-12 Schools	Seattle School District	Cleveland High School	Schematic Design	100	3	90%	24	Yes	1	4	.	.	.	Yes	.	50	50
44	K-12 Schools	Seattle School District	Garfield High School	Schematic Design	.	5	.	.	.	.	.	.	.	.	.	.	.	.
45	K-12 Schools	Seattle School District	Nathan Hale High School	Schematic Design	50	6	90%	31	.	.	5	5	\$1,782,523	26.59	No	\$125,681	.	.
101	K-12 Schools	Seattle School District	Roosevelt High School	Schematic Design	80	.	70%	49	Yes	4	1	1	\$7,100,000	12.50	Yes	(\$6,000,000)	.	.
94	K-12 Schools	Spokane School District	Rogers High School	Schematic Design	90	.	.	.	.	.	.	.	.	.	.	.	.	.
93	K-12 Schools	Spokane School District	Shadle Park High School	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
49	K-12 Schools	Tacoma School District	Lincoln High School	Schematic Design	95	7	.	.	.	.	.	.	.	.	.	.	.	.
1	K-12 Schools	Tacoma School District #10	Stadium High School Modernization and Ad	Schematic Design	40	5	80%	39	Yes	10	4	3	\$15,747,069	23.80	Yes	.	.	.
4	K-12 Schools	Wahluke School District	Wahluke High School	Project Feasibility	0	9	80%	46	.	.	11	11	\$3,400,000	22.56	No	\$1,364,732	100	0
104	Other	Pierce Transit	Pierce Transit - Maintenance Facility Up	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
105	Other	Pierce Transit	Pierce Transit - Tacoma Dome Station Par	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
90	Other	Seattle Housing Authority	NewHolly Hope VI Redev. Ph 1	Construction Documents	90	2	100%	4	No	.	1	1	\$2,948,996	4.63	No	.	.	.
89	Other	Seattle Public Housing Authority	High Point Hope VI Redev. Ph 1	Design Development	80	2	.	5	.	.	.	.	.	.	No	.	.	.
47	Other	Seattle Public Housing Authority	NewHolly Ph. 2	Design Development	10	2	100%	2	Yes	2	2	2	\$6,012,279	20.64	Yes	.	.	.
48	Other	Seattle Public Housing Authority	NewHolly Ph. 3	Schematic Design	100	3	100%	6	.	.	6	6	\$7,884,000	15.93	No	.	.	.
91	Other	Seattle Public Housing Authority	Rainier Vista Hope VI Redev. Ph 1	Design Development	.	4	90%	158	.	.	15	5	\$2,000,000	4.62	No	.	.	.
9	PFD	Clark County Public Facilities District	Exhibition Center	Construction Documents	30	5	90%	.	.	.	.	.	.	.	.	.	.	.
102	PFD	Edmonds PFD	Center for the Arts	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
87	PFD	OT Spokane PFD	Spokane Convention Center Expansion	Schematic Design	10	4	50%	8	Yes	3	1	1	\$8,555,887	17.54	Yes	.	.	.

Appendix J Subcontractor Selection Summary - continued

2005 Survey Code	RCW Code	Agency Code	Project Name	Stage design was in at GC/CM selection	Percentage of design stage	Total number of firms competing in the GC/CM selection process?	Stage design was in at final (MACC) contract agreement:	Number of bid packages utilized on this project?	Was there a public notice for request for pre- qualifications?	Number of trades prequalified	Number of bid packages the GC/CM bid on?	Number of bid packages the GC/CM performed?	Total dollar volume of self- performed work	% of contract value	Did the GC/CM prequalify any subcontractors?	Total difference between budgeted and actual buyout.	Buyout savings allocated to Owner - percentage	Buyout savings allocated to GCCM - percentage
96	PFD	Pierce County	Convention Center	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
103	PFD	Seattle PFD	WA Baseball Stadium SAFECO Field	.	.	3	.	55	.	.	.	.	.	.	.	.	.	.
5	PFD	Skagit Regional Public Facilities District	McIntyre Hall, Performing Arts and Conference	Design Development	10	6	50%	33	.	.	3	0	\$0	0.00	No	\$0	.	.
40	Ports	Port of Seattle	C1 Baggage Facility	Schematic Design	15	4	50%	68	.	.	2	0	\$0	0.00	No	.	.	.
39	Ports	Port of Seattle	SeaTac Parking Garage	Design Development	50	7	90%	30	Yes	1	3	2	\$11,000,000	20.70	Yes	\$1,016,775	100	0
42	Ports	Port of Seattle	Shilshole Marina Redevelopment	Design Development	60	2	60%	10	.	.	.	.	.	.	No	.	.	.
107	Ports	Port of Seattle	World Trade Center	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
50	UW	University of Washington	Architecture Hall Renovation	Schematic Design	30	5	.	.	.	.	.	.	.	.	.	.	.	.
51	UW	University of Washington	Bioengineering-Genome Sciences Bldg	Schematic Design	80	3	80%	99	Yes	3	1	0	\$0	0.00	Yes	.	100	0
53	UW	University of Washington	Cascade Tower Renovation	Design Development	50	9	80%	.	.	.	.	.	.	.	.	\$699,415	100	0
54	UW	University of Washington	Conibear Shellhouse	Design Development	100	10	80%	25	Yes	2	1	5	\$2,775,000	25.17	Yes	\$245,463	.	.
55	UW	University of Washington	Dempsey Indoor Practice Facility	Design Development	50	3	90%	27	Yes	.	.	.	.	.	Yes	.	.	.
56	UW	University of Washington	EE/CSE Phase 2 Expansion	Schematic Design	50	5	80%	18	Yes	6	3	2	\$10,079,470	22.80	Yes	\$1,329,649	65	35
57	UW	University of Washington	Guggenheim Hall Renovation	Schematic Design	15	7	.	.	.	.	.	.	.	.	.	.	.	.
58	UW	University of Washington	Harborview Bond Program	Schematic Design	50	2	.	.	.	.	.	.	.	.	.	.	.	.
59	UW	University of Washington	Harborview Research & Training Facility	Schematic Design	50	.	80%	25	Yes	.	.	.	.	.	Yes	.	.	.
60	UW	University of Washington	Hec Ed Pavilion Renovation	Schematic Design	50	6	80%	30	Yes	5	3	0	\$0	0.00	Yes	\$963,596	.	.
61	UW	University of Washington	IMA Expansion	Schematic Design	50	6	80%	56	Yes	2	7	7	\$777,696	3.36	Yes	\$3,195,860	100	0
62	UW	University of Washington	Johnson Hall Renovation	Schematic Design	50	7	80%	23	Yes	4	3	3	\$5,920,653	18.37	Yes	\$205,376	100	0
63	UW	University of Washington	Law School Building	Schematic Design	50	7	80%	29	Yes	6	1	1	\$6,102,000	11.78	Yes	\$3,386,412	100	0
64	UW	University of Washington	Oceanography Research & Training	Schematic Design	50	.	90%	42	Yes	.	1	1	.	.	Yes	.	.	.
65	UW	University of Washington	Pacific Tower	Schematic Design	50	4	80%	22	Yes	2	3	3	\$980,143	4.43	Yes	\$2,424,289	100	0
66	UW	University of Washington	Surgery Pavilion	Design Development	60	7	80%	45	Yes	2	2	2	\$6,695,600	10.53	Yes	\$4,935,000	100	0
67	UW	University of Washington	Suzzallo Library Renovation	Schematic Design	50	8	80%	27	Yes	4	3	0	\$0	0.00	Yes	\$1,234,288	100	0
68	UW	University of Washington	Tacoma Branch Campus Phase 1A	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
70	UW	University of Washington	Tacoma Branch Campus Phase 2B	Design Development	50	10	80%	23	Blank	3	3	2	\$464,865	1.79	Yes	\$366,326	.	.
73	WSU	Washington State University	Biotechnology/ Life Sciences Facility (R	Schematic Design	100	5	.	.	.	.	.	.	.	.	.	.	.	.
74	WSU	Washington State University	ELSB Vancouver	Construction Documents	95	9	.	.	.	.	.	.	.	.	.	.	.	.
75	WSU	Washington State University	Energy Plan (Steam Plant Redevelopment)	Construction Documents	85	6	.	.	.	.	.	.	.	.	.	.	.	.
76	WSU	Washington State University	Johnson Hall - Plant Biosciences Complex	Design Development	60	7	.	.	.	.	.	.	.	.	.	.	.	.
78	WSU	Washington State University	Scholars Hall	Construction Documents	60	5	.	.	.	.	.	.	.	.	.	.	.	.
77	WSU	Washington State University	School of Communication Addition (Morrow	Construction Documents	60	5	.	.	.	.	.	.	.	.	.	.	.	.
79	WSU	Washington State University	Spokane Academic Center	Schematic Design	50	8	.	.	.	.	.	.	.	.	.	.	.	.
80	WSU	Washington State University	Spokane Health Sciences Bldg	Construction Documents	95	5	.	.	.	.	.	.	.	.	.	.	.	.
81	WSU	Washington State University	Spokane Nursing Center	Schematic Design	10	5	.	.	.	.	.	.	.	.	.	.	.	.
108	WSU	Washington State University	Student Recreation Center	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
82	WSU	Washington State University	Teaching and Learning Center	Construction Documents	95	5	.	.	.	.	.	.	.	.	.	.	.	.
85	WSU	Washington State University	Tri-Cities Bio-Products Facility	Schematic Design	50	4	.	.	.	.	.	.	.	.	.	.	.	.
83	WSU	Washington State University	Vancouver Multi-media Classroom Bldg	Construction Documents	95	9	.	.	.	.	.	.	.	.	.	.	.	.
84	WSU	Washington State University	Vancouver Student Services	.	.	4	.	.	.	.	.	.	.	.	.	.	.	.
108	108	108	108	85	75	88	61	61	42	38	53	45	43	43	56	37	32	32

Appendix K Third Party Selection Summary

2005 Survey Code	RCW Code	Agency Code	Project Name	Was a third party retained for project management service, other than the AE or GC/CM?	Name of third party consultant:	Was a third party, other than the A/E or GCCM, retained for any of the following preconstruction services?	Value Engineering	Scheduling	Constructability Reviews	Estimating	Other Services
6	Cities	Bellevue	New City Building Redevelopment	Yes	Hainline Associates	Yes	No	Yes	No	No	No
12	Cities	Everett	Water Pollution Control Facility Phase A	No		No	.	.	.	.	.
88	Cities	Seattle	Aquarium, Pier 59 Renovations	Yes	Seattle Structural PS Inc.	No	.	.	.	.	.
41	Cities	Seattle	City Fire Station #10	Yes	Shiels Obletz Johnsen Inc.	.	.	.	.	.	.
31	Cities	Seattle	City Justice Center	Yes	Shiels Obletz Johnsen Inc.	No	.	.	.	.	.
11	Cities	Seattle	Landsburg Fish Passage & Diversion Facility	No		No	.	.	.	.	.
43	Cities	Seattle	McCaw Hall	Yes	Barrientos, LLC	No	.	.	.	.	.
109	Cities	Seattle	Park 90-5	.		.	.	.	.	.	.
95	Cities	Seattle	Police West Precinct Station and Community	.		.	.	.	.	.	.
32	Cities	Seattle	Seattle Central Library	Yes	The Seneca Real Estate Group,	Yes	No	No	No	Yes	No
30	Cities	Seattle	Seattle City Hall	Yes	Shiels Obletz Johnsen Inc.	No	.	.	.	.	.
111	Cities	Seattle Public Utilities	Cedar River Sockeye Hatchery Project	No		.	.	.	.	.	.
29	City PDA	Seattle-Chinatown International District	International District Village Square Ph	No		Yes	No	No	No	Yes	No
33	Counties	King County	King County Courthouse	Yes	The Seneca Real Estate Group,	Yes	No	Yes	Yes	Yes	No
34	Counties	King County	King County Jail	Yes	URS	.	.	.	.	.	.
28	Counties	King County, Department of Natural Resource	Brightwater Treatment Facility	Yes	TBD	Yes	No	Yes	Yes	Yes	No
38	Counties	Pierce County	Adult Detention Facility Construction an	No		No	.	.	.	.	.
97	Counties	Snohomish County	Denney Juvenile Justice Center	.		.	.	.	.	.	.
98	Counties	Snohomish County	Snohomish County City Redevelopment	.		.	.	.	.	.	.
71	Ferries	Washington State Ferries	Anacortes Terminal Relocation	Yes	Jacobs Engineering Group/UW	.	.	.	.	.	.
27	GA	GA	WA Sate Legislative Building Rehabilitation	No		No	.	.	.	.	.
15	GA	GA/Cascadia CC	UW-CCC Bothel Branch Campus Phase I & II	No		No	.	.	.	.	.
26	GA	GA/Department of Veterans Affairs	WA State Veterans Home	No		No	.	.	.	.	.
106	GA	GA/DOC	Airway Heights Corrections Center	.		.	.	.	.	.	.
10	GA	GA/DOC	Larch & Cedar Creek Corrections Centers	No		No	.	.	.	.	.
16	GA	GA/DOC	Monroe Close Custody Conversion & Repair	Yes	Clerk of the works	Yes	No	No	No	Yes	No
17	GA	GA/DOC	Special Offender Unit--Expand to 400 bed	Yes	Intermountain Consulting - CI	Yes	No	No	No	Yes	No
18	GA	GA/DOC	Stafford Creek Corrections Center, Phase	Yes	Turner Construction Company	No	.	.	.	.	.
20	GA	GA/DOC	Washington State Reformatory - 400 Bed A	Yes	Clerk of the works	Yes	No	No	No	Yes	No
8	GA	GA/DOC	WCC 97-99 Correctional Industries & Mast	No		No	.	.	.	.	.
72	GA	GA/DOC	WCCW Mental Health & Recep.	No		No	.	.	.	.	.
19	GA	GA/DOC	WCCW Replace G Units with 256 Bed Housing	No		No	.	.	.	.	.
22	GA	GA/Everett CC	Glacier/Pilchuck & Monte Cristo - Arts &	No		No	.	.	.	.	.
23	GA	GA/Everett CC	Undergraduate Education Center	No		.	.	.	.	.	.
24	GA	GA/Highline CC	HCC/CWU Higher Education Center	Yes	Andrew Clapham and Associates	No	.	.	.	.	.
25	GA	GA/South Puget Sound	Science Complex Addition	No		.	.	.	.	.	.
86	GA	GA-BCC	Robinswood School Replacement (Bldg R)	No		No	.	.	.	.	.
110	GA	GA-DOC	Washington Corrections Center for Women	.		.	.	.	.	.	.
21	GA	GA-DSHS	Special Commitment Center Construction	Yes	Heery International	Yes	Yes	No	No	Yes	No
46	Hospitals	Skagit Valley Public Hospital District #	Island Hospital	Yes	Marc L Estvold, Inc.	.	.	.	.	.	.
3	Hospitals	Skagit Valley Public Hospital District N	Skagit Valley Hospital	Yes	Ritter Construction Management	Yes	Yes	No	No	Yes	No
2	K-12 Schools	Aberdeen School District	Aberdeen High School	Yes	Heery International	Yes	Yes	No	No	Yes	No
7	K-12 Schools	Eastmont School District	Eastmont Middle School	Yes	KJM & Associates	Yes	No	Yes	No	Yes	Yes
13	K-12 Schools	Evergreen School District	Evergreen High School	.		.	.	.	.	.	.
92	K-12 Schools	Griffin School District #324	Elementary/Middle School	Yes	Absher Construction Company, I	Yes	Yes	No	No	Yes	Yes
35	K-12 Schools	Lake Washington School District	Mann Elementary School	No		Yes	Yes	No	No	Yes	No
36	K-12 Schools	Northshore School District	Bothell High School, Phase 2	No		Yes	Yes	No	Yes	Yes	No
37	K-12 Schools	Northshore School District	Northshore Junior High School	Yes	Washington State GA	Yes	Yes	No	Yes	Yes	Yes
99	K-12 Schools	Olympia School District	New Capital High School	.		.	.	.	.	.	.
100	K-12 Schools	Seattle School District	Cleveland High School	Yes	Heery International	Yes	Yes	No	Yes	No	Yes
44	K-12 Schools	Seattle School District	Garfield High School	Yes	Heery International	Yes	Yes	Yes	No	Yes	Yes
45	K-12 Schools	Seattle School District	Nathan Hale High School	Yes	Heery International	Yes	No	No	No	Yes	No
101	K-12 Schools	Seattle School District	Roosevelt High School	Yes	Heery International	Yes	No	No	Yes	Yes	No
94	K-12 Schools	Spokane School District	Rogers High School	Yes	Heery International	.	.	.	.	.	.
93	K-12 Schools	Spokane School District	Shadle Park High School	Yes	TBD	.	.	.	.	.	.
49	K-12 Schools	Tacoma School District	Lincoln High School	Yes	Heery International	Yes	Yes	Yes	No	Yes	No

Appendix K Third Party Selection Summary - continued

2005 Survey Code	RCW Code	Agency Code	Project Name	Was a third party retained for project management service, other than the AE or GC/CM?	Name of third party consultant:	Was a third party, other than the A/E or GCCM, retained for any of the following preconstruction services?	Value Engineering	Scheduling	Constructability Reviews	Estimating	Other Services
1	K-12 Schools	Tacoma School District #10	Stadium High School Modernization and Ad	Yes	Turner Construction Company	Yes	Yes	No	No	No	No
4	K-12 Schools	Wahluke School District	Wahluke High School	Yes	KJM & Associates	No	.	.	.	.	.
104	Other	Pierce Transit	Pierce Transit - Maintenance Facility Up	.		.	.	.	.	.	.
105	Other	Pierce Transit	Pierce Transit - Tacoma Dome Station Par	.		.	.	.	.	.	.
90	Other	Seattle Housing Authority	NewHolly Hope VI Redev. Ph 1	Yes	Popkin Development	No	.	.	.	.	.
89	Other	Seattle Public Housing Authority	High Point Hope VI Redev. Ph 1	No		No	.	.	.	.	.
47	Other	Seattle Public Housing Authority	NewHolly Ph. 2	Yes	Popkin Development	No	.	.	.	.	.
48	Other	Seattle Public Housing Authority	NewHolly Ph. 3	No		No	.	.	.	.	.
91	Other	Seattle Public Housing Authority	Rainer Vista Hope VI Redev. Ph 1	No		Yes	No	No	No	Yes	No
9	PFD	Clark County Public Facilities District	Exhibition Center	No		Yes	No	No	No	Yes	No
102	PFD	Edmonds PFD	Center for the Arts	.		.	.	.	.	.	.
87	PFD	OT Spokane PFD	Spokane Convention Center Expansion	Yes	Mathew J. Walker	No	.	.	.	.	.
96	PFD	Pierce County	Convention Center	.		.	.	.	.	.	.
103	PFD	Seattle PFD	WA Baseball Stadium SAFECO Field	.		.	.	.	.	.	.
5	PFD	Skagit Regional Public Facilities District	McIntyre Hall, Performing Arts and Conference	Yes	Marc L Estvold, Inc.	Yes	No	No	No	Yes	No
40	Ports	Port of Seattle	C1 Baggage Facility	No		No	.	.	.	.	.
39	Ports	Port of Seattle	SeaTac Parking Garage	Yes	O'Brien-Kreitzberg	No	.	.	.	.	.
42	Ports	Port of Seattle	Shilshole Marina Redevelopment	No		Yes	Yes	Yes	No	No	No
107	Ports	Port of Seattle	World Trade Center	.		.	.	.	.	.	.
50	UW	University of Washington	Architecture Hall Renovation	No		.	.	.	.	.	.
51	UW	University of Washington	Bioengineering-Genome Sciences Bldg	Yes	JJ Henri	Yes	No	No	No	No	Yes
53	UW	University of Washington	Cascade Tower Renovation	Yes	Bovis	Yes	No	No	Yes	No	No
54	UW	University of Washington	Conibear Shellhouse	No		Yes	No	No	No	No	Yes
55	UW	University of Washington	Dempsey Indoor Practice Facility	Yes	Washington Group	Yes	No	No	No	Yes	No
56	UW	University of Washington	EE/CSE Phase 2 Expansion	Yes	Washington Group	Yes	No	No	Yes	No	No
57	UW	University of Washington	Guggenheim Hall Renovation	Yes	Not Identified	.	.	.	.	.	.
58	UW	University of Washington	Harborview Bond Program	No		.	.	.	.	.	.
59	UW	University of Washington	Harborview Research & Training Facility	No		Yes	Yes	No	Yes	Yes	No
60	UW	University of Washington	Hec Ed Pavilion Renovation	Yes	Washington Group	Yes	Yes	No	Yes	No	No
61	UW	University of Washington	IMA Expansion	No		Yes	No	No	No	No	Yes
62	UW	University of Washington	Johnson Hall Renovation	No		Yes	No	Yes	Yes	Yes	No
63	UW	University of Washington	Law School Building	Yes	JJ Henri	Yes	No	No	Yes	No	No
64	UW	University of Washington	Oceanography Research & Training	Yes	Not Identified	Yes	No	No	Yes	No	No
65	UW	University of Washington	Pacific Tower	No		.	.	.	.	.	.
66	UW	University of Washington	Surgery Pavilion	No		Yes	No	No	No	No	Yes
67	UW	University of Washington	Suzzallo Library Renovation	Yes	JJ Henri	.	.	.	.	.	.
68	UW	University of Washington	Tacoma Branch Campus Phase 1A	.		.	.	.	.	.	.
70	UW	University of Washington	Tacoma Branch Campus Phase 2B	Yes	JJ Henri	Yes	No	No	No	No	Yes
73	WSU	Washington State University	Biotechnology/ Life Sciences Facility (R	No		Yes	No	No	No	Yes	Yes
74	WSU	Washington State University	ELSB Vancouver	No		Yes	Yes	No	Yes	No	No
75	WSU	Washington State University	Energy Plan (Steam Plant Redevelopment)	No		Yes	Yes	Yes	Yes	No	No
76	WSU	Washington State University	Johnson Hall - Plant Biosciences Complex	No		Yes	No	No	No	Yes	No
78	WSU	Washington State University	Scholars Hall	No		Yes	No	No	Yes	Yes	No
77	WSU	Washington State University	School of Communication Addition (Murrow	No		Yes	No	No	Yes	No	No
79	WSU	Washington State University	Spokane Academic Center	No		Yes	Yes	No	No	Yes	Yes
80	WSU	Washington State University	Spokane Health Sciences Bldg	Yes	KJM & Associates	Yes	No	No	No	No	Yes
81	WSU	Washington State University	Spokane Nursing Center	No		Yes	No	No	No	Yes	No
108	WSU	Washington State University	Student Recreation Center	.		.	.	.	.	.	.
82	WSU	Washington State University	Teaching and Learning Center	Yes	KJM & Associates	Yes	No	No	Yes	Yes	Yes
85	WSU	Washington State University	Tri-Cities Bio-Products Facility	No		Yes	No	No	No	No	Yes
83	WSU	Washington State University	Vancouver Multi-media Classroom Bldg	No		Yes	No	No	Yes	No	No
84	WSU	Washington State University	Vancouver Student Services	No		Yes	No	No	No	No	Yes
Response Count			108	108	92	108	78	52	52	52	52

Appendix L Protests and Claims Summary

2005 Survey Code	RCW Code	Agency Code	Project Name	During the GCCM selection process were any protests or complaints filed?	During the subcontractor selection process were any protests or complaints filed?	Were any formal subcontractor Claims filed?	Were there any formal Claims between the Owner/Agency and the GC/CM?	Number of claims	Total claims settlement amount
6	Cities	Bellevue	New City Building Redevelopment	No	No	No	.	.	.
12	Cities	Everett	Water Pollution Control Facility Phase A	Yes	.	.	.	.	.
88	Cities	Seattle	Aquarium, Pier 59 Renovations	No	.	.	.	.	.
41	Cities	Seattle	City Fire Station #10	.	.	.	.	.	.
31	Cities	Seattle	City Justice Center	No	No	No	No	.	.
11	Cities	Seattle	Landsburg Fish Passage & Diversion Facility	No	No	No	No	.	.
43	Cities	Seattle	McCaw Hall	No	No	Yes	No	.	.
109	Cities	Seattle	Park 90-5	.	.	.	.	.	.
95	Cities	Seattle	Police West Precinct Station and Community	.	.	.	.	.	.
32	Cities	Seattle	Seattle Central Library	No	Yes	Yes	Yes	66	.
30	Cities	Seattle	Seattle City Hall	No	No	No	No	.	.
111	Cities	Seattle Public Utilities	Cedar River Sockeye Hatchery Project	No	.	.	.	.	.
29	City PDA	Seattle-Chinatown International District	International District Village Square Ph	No	No	No	No	.	.
33	Counties	King County	King County Courthouse	No	.	.	.	.	.
34	Counties	King County	King County Jail	.	.	.	.	.	.
28	Counties	King County, Department of Natural Resource	Brightwater Treatment Facility	No	.	.	.	.	.
38	Counties	Pierce County	Adult Detention Facility Construction an	No	No	Yes	Yes	1	.
97	Counties	Snohomish County	Denney Juvenile Justice Center	.	.	.	.	.	.
98	Counties	Snohomish County	Snohomish County City Redevelopment	.	.	.	.	.	.
71	Ferries	Washington State Ferries	Anacortes Terminal Relocation	.	.	.	.	.	.
27	GA	GA	WA Sate Legislative Building Rehabilitation	No	Yes	Yes	.	.	.
15	GA	GA/Cascadia CC	UW-CCC Bothel Branch Campus Phase I & II	No	No	No	No	.	.
26	GA	GA/Department of Veterans Affairs	WA State Veterans Home	No	Yes	No	No	.	.
106	GA	GA/DOC	Airway Heights Corrections Center	.	Yes	Yes	Yes	1	\$2,700,000
10	GA	GA/DOC	Larch & Cedar Creek Corrections Centers	No	No	No	No	.	.
16	GA	GA/DOC	Monroe Close Custody Conversion & Repair	No	No	No	No	.	.
17	GA	GA/DOC	Special Offender Unit--Expand to 400 bed	No	No	No	No	.	.
18	GA	GA/DOC	Stafford Creek Corrections Center, Phase	No	No	Yes	No	1	\$5,997,645
20	GA	GA/DOC	Washington State Reformatory - 400 Bed A	No	No	No	No	.	.
8	GA	GA/DOC	WCC 97-99 Correctional Industries & Mast	No	No	No	No	.	.
72	GA	GA/DOC	WCCW Mental Health & Recep.	No	No	No	No	.	.
19	GA	GA/DOC	WCCW Replace G Units with 256 Bed Housing	No	.	.	No	.	.
22	GA	GA/Everett CC	Glacier/Pilchuck & Monte Cristo - Arts &	No	.	.	.	.	.
23	GA	GA/Everett CC	Undergraduate Education Center	.	.	.	.	.	.
24	GA	GA/Highline CC	HCC/CWU Higher Education Center	No	No	No	No	.	.
25	GA	GA/South Puget Sound	Science Complex Addition	.	.	.	.	.	.
86	GA	GA-BCC	Robinswood School Replacement (Bldg R)	No	Yes	No	No	.	.
110	GA	GA-DOC	Washington Corrections Center for Women	No	.	.	No	.	.
21	GA	GA-DSHS	Special Commitment Center Construction	No	No	No	No	.	.
46	Hospitals	Skagit Valley Public Hospital District #	Island Hospital	.	.	.	.	.	.
3	Hospitals	Skagit Valley Public Hospital District N	Skagit Valley Hospital	No	.	.	.	.	.
2	K-12 Schools	Aberdeen School District	Aberdeen High School	No	.	.	.	.	.
7	K-12 Schools	Eastmont School District	Eastmont Middle School	No	No	No	No	.	.
13	K-12 Schools	Evergreen School District	Evergreen High School	.	.	.	.	.	.
92	K-12 Schools	Griffin School District #324	Elementary/Middle School	No	No	No	No	.	.
35	K-12 Schools	Lake Washington School District	Mann Elementary School	No	No	No	No	.	.
36	K-12 Schools	Northshore School District	Bothell High School, Phase 2	No	No	No	No	.	.
37	K-12 Schools	Northshore School District	Northshore Junior High School	No	No	No	No	1	\$286,000
99	K-12 Schools	Olympia School District	New Capital High School	.	.	.	.	.	.
100	K-12 Schools	Seattle School District	Cleveland High School	No	.	.	.	.	.
44	K-12 Schools	Seattle School District	Garfield High School	No	.	.	.	.	.
45	K-12 Schools	Seattle School District	Nathan Hale High School	No	No	No	.	.	.
101	K-12 Schools	Seattle School District	Roosevelt High School	No	No	Yes	Yes	1	.
94	K-12 Schools	Spokane School District	Rogers High School	.	.	.	.	.	.
93	K-12 Schools	Spokane School District	Shadle Park High School	.	.	.	.	.	.
49	K-12 Schools	Tacoma School District	Lincoln High School	Yes	.	.	.	.	.
1	K-12 Schools	Tacoma School District #10	Stadium High School Modernization and Ad	No	No	No	No	.	.

Appendix L Protests and Claims Summary – continued

2005 Survey Code	RCW Code	Agency Code	Project Name	During the GCCM selection process were any protests or complaints filed?	During the subcontractor selection process were any protests or complaints filed?	Were any formal subcontractor Claims filed?	Were there any formal Claims between the Owner/Agency and the GC/CM?	Number of claims	Total claims settlement amount
4	K-12 Schools	Wahluke School District	Wahluke High School	No	No	No	.	.	.
104	Other	Pierce Transit	Pierce Transit - Maintenance Facility Up	.	.	.	.	.	.
105	Other	Pierce Transit	Pierce Transit - Tacoma Dome Station Par	.	.	.	.	.	.
90	Other	Seattle Housing Authority	NewHolly Hope VI Redev. Ph 1	No	No	No	No	.	.
89	Other	Seattle Public Housing Authority	High Point Hope VI Redev. Ph 1	No	Yes	No	.	.	.
47	Other	Seattle Public Housing Authority	NewHolly Ph. 2	No	No	No	Yes	1	\$160,000
48	Other	Seattle Public Housing Authority	NewHolly Ph. 3	No	No	No	No	.	.
91	Other	Seattle Public Housing Authority	Rainier Vista Hope VI Redev. Ph 1	No	.	No	No	.	.
9	PFD	Clark County Public Facilities District	Exhibition Center	No	No	No	No	.	.
102	PFD	Edmonds PFD	Center for the Arts	.	.	.	.	.	.
87	PFD	OT Spokane PFD	Spokane Convention Center Expansion	No	Yes	Yes	.	.	.
96	PFD	Pierce County	Convention Center	.	.	.	.	.	.
103	PFD	Seattle PFD	WA Baseball Stadium SAFECO Field	.	.	.	.	.	.
5	PFD	Skagit Regional Public Facilities District	McIntyre Hall, Performing Arts and Conference	No	No	No	No	.	.
40	Ports	Port of Seattle	C1 Baggage Facility	No	Yes	.	.	.	.
39	Ports	Port of Seattle	SeaTac Parking Garage	No	No	No	Yes	1	\$1,656,187
42	Ports	Port of Seattle	Shilshole Marina Redevelopment	No	.	.	.	.	.
107	Ports	Port of Seattle	World Trade Center	.	.	.	.	.	.
50	UW	University of Washington	Architecture Hall Renovation	No	.	.	.	.	.
51	UW	University of Washington	Bioengineering-Genome Sciences Bldg	No	Yes	Yes	.	.	.
53	UW	University of Washington	Cascade Tower Renovation	No	.	.	No	.	.
54	UW	University of Washington	Conibear Shellhouse	No	No	No	.	.	.
55	UW	University of Washington	Dempsey Indoor Practice Facility	.	.	.	No	.	.
56	UW	University of Washington	EE/CSE Phase 2 Expansion	No	No	Yes	No	.	.
57	UW	University of Washington	Guggenheim Hall Renovation	No	.	.	.	.	.
58	UW	University of Washington	Harborview Bond Program	No	.	.	.	.	.
59	UW	University of Washington	Harborview Research & Training Facility	.	.	.	No	.	.
60	UW	University of Washington	Hec Ed Pavilion Renovation	No	.	.	No	.	.
61	UW	University of Washington	IMA Expansion	No	No	No	No	.	.
62	UW	University of Washington	Johnson Hall Renovation	No	Yes	.	.	.	.
63	UW	University of Washington	Law School Building	No	No	No	No	.	.
64	UW	University of Washington	Oceanography Research & Training	.	.	.	.	.	.
65	UW	University of Washington	Pacific Tower	No	No	No	No	.	.
66	UW	University of Washington	Surgery Pavilion	No	No	No	No	.	.
67	UW	University of Washington	Suzzallo Library Renovation	No	No	No	No	.	.
68	UW	University of Washington	Tacoma Branch Campus Phase 1A	.	.	.	.	.	.
70	UW	University of Washington	Tacoma Branch Campus Phase 2B	No	Yes	No	.	.	.
73	WSU	Washington State University	Biotechnology/ Life Sciences Facility (R	No	.	.	.	.	.
74	WSU	Washington State University	ELSB Vancouver	No	.	.	No	.	.
75	WSU	Washington State University	Energy Plan (Steam Plant Redevelopment)	No	.	.	.	.	.
76	WSU	Washington State University	Johnson Hall - Plant Biosciences Complex	No	.	.	.	.	.
78	WSU	Washington State University	Scholars Hall	No	.	.	No	.	.
77	WSU	Washington State University	School of Communication Addition (Murrow	No	.	.	.	.	.
79	WSU	Washington State University	Spokane Academic Center	No	.	.	.	.	.
80	WSU	Washington State University	Spokane Health Sciences Bldg	No	.	.	.	.	.
81	WSU	Washington State University	Spokane Nursing Center	No	.	.	.	.	.
108	WSU	Washington State University	Student Recreation Center	.	.	.	.	.	.
82	WSU	Washington State University	Teaching and Learning Center	No	.	.	.	.	.
85	WSU	Washington State University	Tri-Cities Bio-Products Facility	No	.	.	.	.	.
83	WSU	Washington State University	Vancouver Multi-media Classroom Bldg	No	.	.	.	.	.
84	WSU	Washington State University	Vancouver Student Services	No	.	.	.	.	.

Response Count

108

108

82

50

49

48

8

5



## Appendix M Construction Firms

### List of Construction Firms by Size

Gray marks successful firms. Unsuccessful attempts are as reported.

**Large** Revenue greater than \$500 million National and international firms

**Mid** Revenue \$100 to \$500 million Large NW firms with majority of revenue from NW construction projects

**Small** Revenue under \$100 million Small NW firms

Firm	Size	Unsuccessful Bids	% of 102 projects	Successful Bids	% of 102 projects	Total Attempts	% Successful
Atkinson Construction	Large	1	0.98%	0	0.00%	1	0.00%
CH2MHILL Constructors, Inc	Large	1	0.98%	1	0.98%	2	50.00%
CRSS Constructors	Large	1	0.98%	0	0.00%	1	0.00%
Dick Corporation	Large	3	2.94%	0	0.00%	3	0.00%
Dillingham Construction	Large	1	0.98%	0	0.00%	1	0.00%
DPR Construction	Large	9	8.82%	0	0.00%	9	0.00%
Ellis-Don	Large	5	4.90%	0	0.00%	5	0.00%
Fluor Daniel	Large	3	2.94%	1	0.98%	4	25.00%
Gilbane Building Compnay	Large	8	7.84%	1	0.98%	9	11.11%
Graham(Shea)	Large	6	5.88%	3	2.94%	9	33.33%
Heery International	Large	3	2.94%	0	0.00%	3	0.00%
Hensel Phelps Const Co	Large	4	3.92%	0	0.00%	4	0.00%
JA Jones	Large	1	0.98%	0	0.00%	1	0.00%
JE Dunn Construction	Large	4	3.92%	0	0.00%	4	0.00%
Kiewitt Construction Company	Large	5	4.90%	1	0.98%	6	16.67%
Ledcor	Large	1	0.98%	0	0.00%	1	0.00%
M.A. Mortenson Company	Large	28	27.45%	15	14.71%	43	34.88%
McCarthy(SDL)	Large	10	9.80%	1	0.98%	11	9.09%
PCL	Large	6	5.88%	0	0.00%	6	0.00%
Siemens	Large	1	0.98%	0	0.00%	1	0.00%
Skanska (Baugh)	Large	29	28.43%	14	13.73%	43	32.56%
Swinerton	Large	5	4.90%	0	0.00%	5	0.00%
Turner Construction Company	Large	37	36.27%	8	7.84%	45	17.78%
Absher	Mid	30	29.41%	11	10.78%	41	26.83%
Anderson Construction	Mid	1	0.98%	0	0.00%	1	0.00%
Bayley Construction	Mid	19	18.63%	0	0.00%	19	0.00%
Garco Construction	Mid	5	4.90%	0	0.00%	5	0.00%
GLY	Mid	6	5.88%	0	0.00%	6	0.00%
Hoffman Construction Company	Mid	25	24.51%	19	18.63%	44	43.18%
Howard S. Wright Construction Company	Mid	9	8.82%	0	0.00%	9	0.00%
Kitchell Contractors	Mid	2	1.96%	2	1.96%	4	50.00%
Lease Crutcher Lewis	Mid	20	19.61%	6	5.88%	26	23.08%
Lydig Construction	Mid	18	17.65%	3	2.94%	21	14.29%
RCI Construction Group	Mid	1	0.98%	0	0.00%	1	0.00%
Roebbelen Construction	Mid	2	1.96%	0	0.00%	2	0.00%
Sellen Construction	Mid	7	6.86%	5	4.90%	12	41.67%
Soltec Pacific	Mid	1	0.98%	0	0.00%	1	0.00%
The Austin Company	Mid	1	0.98%	0	0.00%	1	0.00%
Walsh Construction	Mid	3	2.94%	3	2.94%	6	50.00%

## Appendix M Construction Firms – continued

Firm	Size	Unsuccessful Bids	% of 102 projects	Successful Bids	% of 102 projects	Total Attempts	% Successful
Berschauer Phillips Construction	Small	3	2.94%	0	0.00%	3	0.00%
Blount Construction	Small	1	0.98%	0	0.00%	1	0.00%
Bodenhamer Construction	Small	2	1.96%	0	0.00%	2	0.00%
Bouten Construction	Small	2	1.96%	1	0.98%	3	33.33%
CDK Construction Services	Small	3	2.94%	0	0.00%	3	0.00%
Cree	Small	2	1.96%	0	0.00%	2	0.00%
Crownover Construction	Small	1	0.98%	0	0.00%	1	0.00%
Drake Construction	Small	5	4.90%	0	0.00%	5	0.00%
E.C.I. General Contractors	Small	1	0.98%	0	0.00%	1	0.00%
Emerick Construction Company	Small	3	2.94%	0	0.00%	3	0.00%
Finn Construction	Small	1	0.98%	0	0.00%	1	0.00%
Fisher & Sons	Small	1	0.98%	0	0.00%	1	0.00%
Harza / Goodfellow Bros.	Small	1	0.98%	0	0.00%	1	0.00%
Hilger - Stewart	Small	1	0.98%	0	0.00%	1	0.00%
John Korsmo Construction	Small	2	1.96%	1	0.98%	3	33.33%
John L. Price, Inc	Small	1	0.98%	0	0.00%	1	0.00%
Kirtley Cole	Small	2	1.96%	1	0.98%	3	33.33%
Leone Keeble Gen. Contractors	Small	2	1.96%	0	0.00%	2	0.00%
Market Street Systems	Small	1	0.98%	0	0.00%	1	0.00%
Marpac Construction LLC	Small	0	0.00%	1	0.98%	1	100.00%
McClure and Sons, Inc.	Small	1	0.98%	0	0.00%	1	0.00%
Metcalf Grim	Small	1	0.98%	0	0.00%	1	0.00%
Morse-Diesel	Small	2	1.96%	0	0.00%	2	0.00%
MWH Constructors, Inc with Pease & Sons	Small	1	0.98%	0	0.00%	1	0.00%
Natt McDougall Company	Small	1	0.98%	1	0.98%	2	50.00%
Nielsen Dillingham	Small	2	1.96%	0	0.00%	2	0.00%
Powell	Small	1	0.98%	0	0.00%	1	0.00%
Rafn Construction	Small	3	2.94%	0	0.00%	3	0.00%
Robinson Construction	Small	2	1.96%	2	1.96%	4	50.00%
Todd Construction	Small	1	0.98%	0	0.00%	1	0.00%
Vemo Construction	Small	5	4.90%	0	0.00%	5	0.00%
W. G. Clark	Small	5	4.90%	0	0.00%	5	0.00%
Wade Perrow	Small	1	0.98%	0	0.00%	1	0.00%
Walker	Small	2	1.96%	1	0.98%	3	33.33%
Wallace Roberts Todd	Small	1	0.98%	0	0.00%	1	0.00%
Count		74					
Total		386		102		488	
Mean		5.22	5.11%	1.38	1.35%	6.59	10.98%
Std. Dev.		7.79	7.64%	3.58	3.51%	10.92	19.55%
Median		2.00	1.96%	0	0.00%	3	0.00%
Min		0.00	0.00%	0	0.00%	1	0.00%
Max		37	36.27%	19	18.63%	45	100.00%

## Appendix N

### List of Third Party Consultants

RCW Code	Project Name	Name of third party consultant:
K-12 Schools	Elementary/Middle School	Absher Construction Company, I
GA	HCC/CWU Higher Education Center	Andrew Clapham and Associates
Cities	McCaw Hall	Barrientos, LLC
UW	Cascade Tower Renovation	Bovis
GA	Monroe Close Custody Conversion & Repair	Clerk of the works
GA	Washington State Reformatory - 400 Bed A	Clerk of the works
Cities	New City Building Redevelopment	Hainline Associates
K-12 Schools	Aberdeen High School	Heery International
K-12 Schools	Roosevelt High School	Heery International
K-12 Schools	Garfield High School	Heery International
K-12 Schools	Nathan Hale High School	Heery International
K-12 Schools	Rogers High School	Heery International
K-12 Schools	Lincoln High School	Heery International
GA	Special Commitment Center Construction	Heery International
GA	Special Offender Unit--Expand to 400 bed	Intermountain Consulting - CI
Ferries	Anacortes Terminal Relocation	Jacobs Engineering Group/UW
UW	Bioengineering-Genome Sciences Bldg	JJ Henri
UW	Law School Building	JJ Henri
UW	Suzzallo Library Renovation	JJ Henri
UW	Tacoma Branch Campus Phase 2B	JJ Henri
K-12 Schools	Eastmont Middle School	KJM & Associates
K-12 Schools	Wahluke High School	KJM & Associates
WSU	Spokane Health Sciences Bldg	KJM & Associates
WSU	Teaching and Learning Center	KJM & Associates
Hospitals	Island Hospital	Marc L Estvold, Inc.
PFD	McIntyre Hall, Performing Arts and Confe	Marc L Estvold, Inc.
PFD	Spokane Convention Center Expansion	Mathew J. Walker
UW	Guggenheim Hall Renovation	Not Identified
UW	Oceanography Research & Training	Not Identified
Ports	SeaTac Parking Garage	O'Brien-Kreitzberg
Cities	NewHolly Hope VI Redev. Ph 1	Popkin Development
Cities	NewHolly Ph. 2	Popkin Development
Hospitals	Skagit Valley Hospital	Ritter Construction Management
Cities	Aquarium, Pier 59 Renovations	Seattle Structural PS Inc.
Cities	City Fire Station #10	Shiels Oblatz Johnsen Inc.
Cities	City Justice Center	Shiels Oblatz Johnsen Inc.
Cities	Seattle City Hall	Shiels Oblatz Johnsen Inc.
Counties	Brightwater Treatment Facility	TBD
K-12 Schools	Shadle Park High School	TBD
Cities	Seattle Central Library	The Seneca Real Estate Group,
Counties	King County Courthouse	The Seneca Real Estate Group,
K-12 Schools	Stadium High School Modernization and Ad	Turner Construction Company
GA	Stafford Creek Corrections Center, Phase	Turner Construction Company
Counties	King County Jail	URS
UW	Dempsey Indoor Practice Facility	Washington Group
UW	EE/CSE Phase 2 Expansion	Washington Group
UW	Hec Ed Pavilion Renovation	Washington Group
K-12 Schools	Northshore Junior High School	Washington State GA

## Appendix O Schedule Performance Comments

The following comments are unedited as reported by the survey respondent.

JLARC Agency	Project Name	Comments
City of Bellevue	City Building Redevelopment	Project is currently one month behind schedule.
City of Seattle	City Justice Center	Delay was mutually agreed upon by the contractor, the construction management team, and the Owner to provide for a smoother transition between the closeout, commissioning, and testing work prior to Owner moving in to facility. The end date of August 2002
City of Seattle	Seattle Central Library	Delays in design and two key construction activities.
GA	WA Sate Legislative Building Rehabilitation	Construction is complete. The Project is currently in the Construction Completion Phase and has not yet achieved Final Acceptance.
GA	WA State Veterans Home	Project will be completed within the contract date as modified by Change Order
GA BCC	Robinswood School Replacement (Bldg R)	Actual dates in above schedule. Construction of Building K and road work began 1/15/00, while design work for Building R was not completed until 9/30/00.
GA-BCC	Robinswood School Replacement (Bldg R)	Actual dates in above schedule. Construction of Building K and road work began 1/15/00, while design work for Building R was not completed until 9/30/00.
GA-DOC	Stafford Creek Corrections Center, Phase 1	An opposition group delayed issuance of permits. Rainfall in excess of the 100-year storm events that delayed earthwork. GC/CM could not maintain the schedule and turned buildings over one at a time. DOC took prior occupancy as the buildings became available. The GC/CM demobilized before completing the project. DOC sued the GC/CM. The case was arbitrated and settled.
GA-DOC	WCC 97-99 Correctional Industries & Master Control/Infirmary Improvements	The new roof system failed and had to be replaced. The sub-contractor that installed the 1st roof went out of business. Insurance issues and GC/CM responsibility had to be negotiated/resolved prior to installation of 2nd new roof. This caused a significant delay in completing this project and in issuing the final acceptance.
GA-DOC	WCCW Mental Health & Recep.	Funding for the project was not authorized until July, 1999. Construction was delayed by an extended wait for issue of the building permit and by revisions to the telecommunications design to comply with the latest version of the DOC Telecommunications Infrastructure Standards.

## Appendix O Schedule Performance Comments - continued

The following comments are unedited as reported by the survey respondent.

JLARC Agency	Project Name	Comments
GA-DSHS	Special Commitment Center Construction	This project was initially sited adjacent to McNeil Island Corrections Center. At the end of Design Development, in March 2001, the site was moved two miles to the MICC minimum facility, known as North Complex. DOC decided to close that complex and some of the buildings could be re-used by SCC. Site work design was expedited, new building design was extended 10 months and remodel of existing buildings, a new design effort was scheduled for completion at the end of 2002. Construction was broken into three phases corresponding to the design timetable. Actual construction time from NTP of Bid Package #1 of Phase 1 to completion of Bid Package #3 of Phase 3 exceeded the adjusted GCCM contract time by 155 days. This was primarily due to weather and the logistics of a construction project on a secure prison island where the only transportation is by DOC barge. DSHS took possession of the SCC on April 31, 2004. The delay between substantial completion and final close was due to the administrative complexity of closing out 17 separate bid packages and settling requests for equitable adjustment.
K-12 Griffin	Elementary/Middle School	The project has several design errors and omissions that have not been addressed by the architect.
K-12 Northshore SC	Northshore Junior High School	Substantial completion deadline met and school moved in on schedule. Final acceptance delayed due to mechanical issues and \$700,000 subcontractor claim.
K-12 SEA	Roosevelt High School	Project is still under way and all indicators suggest the project will be completed on time.
OT Skagit Hosp Dist	Island Hospital	We are just in pre-design, about start schematics in March and select a contractor
Pierce County	Adult Detention Facility Construction and Remodel	Delays occurred in Phase 1 Addition relative to the security electronics system installation. Currently in litigation.
Seattle Housing Authority	NewHolly Ph. 3	Project is completed through substantial completion, but final acceptance has not yet occurred.
Seattle Housing Authority	Rainier Vista Hope VI Redev. Ph 1	This project not completed. Design finish date is skewed because portion of project was Bid on permit level documents which pushed out completion of CD's. This was also pushed out because an extensive VE effort was required due to Bids received.

## Appendix O Schedule Performance Comments - continued

The following comments are unedited as reported by the survey respondent.

JLARC Agency	Project Name	Comments
Skagit PDF	McIntyre Hall, Performing Arts and Conference Center	We took occupancy on time, but are still working to do final tweaking of systems
UW	Cascade Tower Renovation	Actually, ahead of schedule.
UW	EE/CSE Phase 2 Expansion	A partial final acceptance was given to release partial retainage and to accept the GC/CMs work, but until all Requests for Equitable Adjustments are finalized, the overall Final Acceptance cannot be
UW	Guggenheim Hall Renovation	At the time of this survey the project is only in Schematic Design Phase
UW	Harborview Research & Training Facility	Original project came in below budget, so additional scope was added after substantial completion was obtained on the original contract.
UW	Hec Ed Pavilion Renovation	Additional scope was added to this project during the end of construction, which is why the delay in the construction schedule. Overall, it was on schedule.
UW	Pacific Tower	Construction was completed a month ahead of schedule
UW	Surgery Pavilion	Buyout savings was used to increase the scope of work.
UW	Suzzallo Library Renovation	This project was put on hold in May, 1997 due to state funding not being allocated for 1997-99 Capital Budget. It was then approved for 1999-01 funding, and reactivated in Spring 1999.
UW	Tacoma Branch Campus Phase 2B	Additional scope was added to this project as well as unforeseen conditions, a flood, two strikes and the 2000 earthquake caused approved schedule delays.
WSU	Energy Plan (Steam Plant Redevelopment)	Issues involving receipt of owner furnished equipment - boilers, controls, etc. delayed the project.

## Appendix P Cost Performance Comments

The following comments are unedited as reported by the survey respondent.

JLARC Agency	Project Name	Comments
CI Bellevue	City Building Redevelopment	Project is currently between 5 and 11 million dollars over budget.
CI Seattle	Seattle Central Library	Delays and changes in scope.
CO King	Brightwater Treatment Facility	Project is in design phase. MACC to be negotiated at 90% design. Project Budgeted amounts are based on 30% projected lifetime costs. Budgeted management costs include all County labor.
CO Pierce	Adult Detention Facility Construction and Remodel	Cost overruns resulted from problems in a number of areas. A lawsuit for \$2.5M has been filed by the security electronics contractor alleging additional work was required. Trial is set for October 2005.
K-12 Lake WA SD	Mann Elementary School	The project was over budget by \$230,000 or 1.8% of budget. The majority of the overage was for soft costs such as architectural fees and after construction items paid for outside this contract.
K-12 Northshore SC	Bothell High School, Phase 2	MACC increased for added scope complexity and extreme market conditions (added scope complexity includes non-profit community arts partner contributing additional floor area and equipment in the performing arts center). Preconstruction fee increased for a
K-12 SEA	Roosevelt High School	Project is still under construction and will be determined once final budget numbers have been verified, however, current estimates trend towards a budget overrun.
K-12 Seattle SD	Nathan Hale High School	Hyper-escalation and demands of city agencies for right of way improvements far exceed the scope of the original budget. The budget was increased to compensate.
OT SHA	Rainier Vista Hope VI Redev. Ph 1	This project is not complete. The Housing portion of the Contract had a Owner controlled contingency of \$1.4M. The Infrastructure portion of the project did not have an adequate budget from the start. In addition, because of permit delays, the Infrastruct
OT Skagit PDF	McIntyre Hall, Performing Arts and Conference Center	During design and construction we were very successful with fund raising so we added \$500,000 worth of extras
PORT Seattle	SeaTac Parking Garage	Budget increased due to owner requested scope additions.
ST GA	WA Sate Legislative Building Rehabilitation	There were substantial changes in scope over the course of construction, including space design changes and associated general construction and systems design and construction impacts; a new telecommunications duct bank, the addition of security systems,
ST GA DVA	WA State Veterans Home	Settlement of outstanding cost issues will determine final project cost.

## Appendix P Cost Performance Comments – continued

The following comments are unedited as reported by the survey respondent.

JLARC Agency	Project Name	Comments
ST GA-DOC	Monroe Close Custody Conversion and Repairs	The project funding was increased from the 1996 C-100 to cover additional scope required for the close custody conversion. Unforeseen building conditions were encountered due to the age (90 years old) of the building.
ST GA-DOC	Special Offender Unit--Expand to 400 beds	The negotiated amounts for fee, preconstruction services, and general conditions are the bid amounts. The GC/CM performed other bid packages for WSR close custody. The fees and general conditions were split 90% to SOU and 10% to WSR projects.
ST GA-DOC	Stafford Creek Corrections Center, Phase 1	Some equipment and improvements were paid for by the Operating budget.
ST GA-DOC	WCCW Replace G Units with 256 Bed Housing	Under budget.
ST GA-DSHS	Special Commitment Center Construction	\$1,795,363 in construction costs were not within the GC/CM MACC. They were in separate contracts.
ST UW	Conibear Shellhouse	Construction scheduled for completion first part of May and is expected to be completed under budget.
ST UW	Harborview Research & Training Facility	Scope was added to the project for Tenant Improvement when funds were available.
ST UW	IMA Expansion	Changes in scope
ST UW	Johnson Hall Renovation	In construction. Expected to be completed within budget.
ST UW	New Law School Building	A \$6million furniture package was added to the scope of work during construction, as well as 43rd St. Right-of-Way revisions. Due to the extensive amount of Errors and Omissions Change Orders, we filed a claim against the A/E, which was settled and brou
ST UW	Tacoma Branch Campus Phase 2B	Project has not been completed and requests for equitable adjustment are still being negotiated



## Appendix Q Contract Changes Comments

The following comments are unedited as reported by the survey respondent.

JLARC Agency Code	Project Name	Comments
CI Bellevue	City Building Redevelopment	The project is not complete and three change orders have been processed to date.
CI Seattle	Seattle Central Library	Claim amount in change orders
PORT Seattle	SeaTac Parking Garage	GC/CM request for equitable adjustment due to multiple changes. DRB assisted with early portion of resolution.
ST GA	WA Sate Legislative Building Rehabilitation	The project is currently in the Construction Completion Phase, so resolution of project costs is still underway. Total Change Order dollar volume and categorization is not yet known. No formal claims have been submitted by the GC/CM against the Owner/Agency to date.
ST GA-DSHS	Special Commitment Center Construction	Change Orders included \$434,038 increase in Precon Services and \$613,363 in General Conditions due to changes in site and moving the contractor yard. These COs did not appear in the MACC. A Change Order of \$604,639 within the MACC was due to changing the contractor yard location.

## Appendix R Protests & Claims

### Summary of formal claims between the Owner/Agency and the GC/CM

The following comments are unedited as reported by the survey respondent.

JLARC Agency Code	Project Name	Comments
CI Seattle	Seattle Central Library	DRB utilized, but mediation required for final settlement. Project policy for professional liability insurance contributed in settlement. Claim amount in Change orders
GA-DOC	Stafford Creek Corrections Center, Phase 1	DOC sued GC/CM for breach of contract when they demobilized without completing security system and about \$500,000 worth of punch list items. GC/CM counter-sued for damages. There were several court rulings and then the parties agreed to binding arbitration.
K-12 Lake WA SD	Mann Elementary School	One informal claim had to do with the GC/CM's overhead expense being higher than they bid. An informal audit of their records indicated that the extra costs may have been associated with the GC/CM record keeping in that they performed a bid package which amounted to about 25% of the work (self performed) We got through this claim by yielding a small buyout savings to the GC/CM as full and final compensation.
K-12 Northshore SC	Northshore Junior High School	Request for additional compensation by subcontractor not perfected as claim. GC/CM negotiated settlement after meetings with lawyers and claims consultants. Settlement occurred prior to DRB step. Owner negotiated share of settlement with GC/CM.
K-12 SEA	Roosevelt High School	One claim has been submitted by the abatement and demolition contractor totaling approximately \$920,000. Claim documentation is currently under review for merit.
Pierce County	Adult Detention Facility Construction and Remodel	Security electronics contractor filed a claim for \$2.5M claiming specs were defective and they were required to do additional work. Tried a self directed ADR process that failed to reach a compromise. This firm has filed suit and may go to trial in Oct.
Port of Seattle	SeaTac Parking Garage	GC/CM request for equitable adjustment due to multiple changes. DRB assisted with early portion of resolution.
Seattle Housing Authority	NewHolly Ph. 2	Dispute was over excavation quantity and was resolved through mediation.
UW	New Law School Building	All requests for equitable adjustment were settled thru the DRB process.

## Appendix R Protests & Claims - continued

### Summary of Subcontractor Protests

The following comments are unedited as reported by the survey respondent.

JLARC Agency Code	Project Name	Comments
City of Seattle	Seattle Central Library	Challenge to mechanical award, later dropped.
GA	WA Sate Legislative Building Rehabilitation	Three incidences: 1. A prospective subcontract bidder appealed the Project Team's initial determination of non-qualification, providing supplemental information supporting their appeal. They were ultimately pre-qualified based on that supplemental information. 2. A subcontract protest was submitted by a demolition subcontract bidder from the Spokane area, which did not prevail, and was withdrawn. 3. A bid protest was filed on one bid package that related to the GC/CM bidding to self-perform, which resulted in a re-bid of that bid package.
GA DVA	WA State Veterans Home	Windows package was bid once and re-bid twice in order to procure the required window size and shape. All bidders were contacted and informed as to the reasons for re-bidding
GA-BCC	Robinswood School Replacement (Bldg R)	The low bidder for the Landscaping package was removed per Section 5.2 of the General Conditions. The bidder's attorney protested to GA's Deputy Attorney General, but withdrew the complaint upon receiving the file on which the "reasonable objection" was based.
GA-DOC	Stafford Creek Corrections Center, Phase 1	Civil contractor has filed two claims against the GC/CM and the results are unknown. Roofing contractor filed a claim against the GC/CM and there was an arbitration award. Concrete/Structural Steel contractor filed a claim in court and was dismissed.
GA-DSHS	Special Commitment Center Construction	Complaints were initially made by some sub-contractors that the contracts offered by the GC/CM placed unfair requirements on the sub-contractor. These were negotiated between the parties and resolved without formal filing.
Port of Seattle	C1 Baggage Facility	Concrete bidding was protested by Turner as they thought that the low bid DBE was not meeting goals. Low bid prevailed. JB Webb protested low bid on baggage handling equipment bid due to DBE questions. Subcontract was rebid.
Seattle Housing Authority	High Point Hope VI Redev. Ph 1	Plumbing Subcontractor
Spokane PFD	Spokane Convention Center Expansion	Electrical sub filed injunction to stop bid award, filed a temporary restraining order but the court dismissed it.
UW	Bioengineering-Genome Sciences Bldg	Johnson Controls filed a protest over the award of Subcontract Package BE-3 & GS-3 Mechanical Controls to Siemens Building Technologies.
UW	Johnson Hall Renovation	Electrical had a protest from second low bidder claiming the low bidder did not include incidental electrical work. A/V subcontractor protested the low A/Vs bid on the basis of not being able to complete the scope of work for that amount.

## Appendix R Protest & Claims - continued

### Summary of Subcontractor Claims

The following comments are unedited as reported by the survey respondent.

JLARC Agency Code	Project Name	Comments
City of Seattle	McCaw Hall	The drywall subcontractor filed a claim again GC/CM; was settled prior to DRB process.
City of Seattle	Seattle Central Library	GC/CM claims included claims from subcontractors. Resolved in mediation process.
GA	WA Sate Legislative Building	One subcontractor, Merrill Contractors, the Bid Package #202 contractor, has filed a lien against the bond of the GC/CM, M. A. Mortenson Company.
K-12 Northshore	Northshore Junior High School	Request for additional compensation by subcontractor not perfected as claim. GC/CM negotiated settlement after meetings with lawyers and claims consultants. Settlement occurred prior to DRB step. Owner negotiated share of settlement with GC/CM.
K-12 Seattle	Roosevelt High School	One request for equitable adjustment received from abatement and demolition subcontractor currently under review.
Pierce County	Adult Detention Facility Construction and Remodel	Fire Alarm sub and electrical sub to security electronics subcontractor also filed claims that are included in security electronics subcontractor's lawsuit.
Seattle Housing Authority	Rainier Vista Hope VI Redev. Ph 1	There have been preliminary notices of intent to file. The agencies understanding is that so far, these have been or are being dealt with and settled through negotiation prior to a formal claim being filed
Spokane PFD	Spokane Convention Center Expansion	The pier drilling company filed a claim against the joint venture.
UW	Bioengineering-Genome Sciences Bldg	Johnson Controls filed a formal complaint over the award of Mechanical Controls to Siemens.
UW	EE/CSE Phase 2 Expansion	WPI, the sheetrock, painting and ceiling subcontractor has filed a claim for \$1.3 mil that is being reviewed by thru the formal DRB process.

## Appendix S Quality Performance Comments

The following comments are unedited as reported by the survey respondent.

JLARC Agency Code	Project Name	Comments
CI Seattle	Aquarium, Pier 59 Renovations	Standards include, but are not limited to: Seattle Parks and Recreation Standard Design Specifications, City of Seattle Standard Plans and Specifications 2005, International Building Code, AASHTO, ACI, AISC, AWS, AISI, ASTM, UFC.
CI Seattle	City Justice Center	We provide in house quality control manager, contractor provided quality control manager, working together in a team concept. We also utilized various subconsultants and architect team that review/inspect the project frequently during construction to assure quality standards are met or exceeded.
CI Seattle	Landsburg Fish Passage & Diversion Facility Improvements Project	Specific to project components
CI Seattle	McCaw Hall	City of Seattle Performance Evaluation Report was prepared for GC/CM and major subcontractors. Report grades 19 categories by points from Inadequate to Superior and contractor is assigned a percent score based on points assigned / total point possible.
CI Seattle	Seattle City Hall	We provide in house quality control manager, contractor provided quality control manager, working together in a team concept. We also utilized various subconsultants and architect team that review/inspect the project frequently during construction to assure quality standards are met or exceeded.
K-12 EASTMONT	New Eastmont Middle School	Timely installation with quality construction means and methods. Project subcontractors cooperating to complete a quality project with well coordinated work under the guidance of the GC/CM. Contractors actively providing their own quality control and the GC/CM providing quality assurance. Timely, well written RFI documents that include contractor recommended solutions. Accurate change order pricing.
K-12 Griffin	Elementary/Middle School	Based on Architect/Engineering plans and specifications
K-12 Lake WA SD	Mann Elementary School	Paint and dry wall, level 4. Moisture content, ductwork kept dry and clean. School/Contractor safety program. Materials for durability.
K-12 Northshore SC	Bothell High School, Phase 2	Our District has design guideline specification manual incorporated into bid documents. Construction is at 50%. Our GC/CM has worked with us to tailor testing and mockups and included Owner in MEP coordination meetings and all subcontractor preconstruction meetings to set quality standards early. Also see our response for Northshore JH.

## Appendix S Quality Performance Comments - continued

The following comments are unedited as reported by the survey respondent.

JLARC Agency Code	Project Name	Comments
K-12 Northshore SC	Northshore Junior High School	Our school district has a design standard specification manual incorporated into the contract documents. Working with the GC/CM during preconstruction challenged our standards and resulted in more cost effective ways of meeting our needs. The preconstruction process also allowed us to identify critical areas and subtrades and review with team to manage our risk.
K-12 Seattle SD	Nathan Hale High School	Seattle school district requires a minimum building life of 50 years. Material and construction standards have been written to ensure this balancing first costs with life cycle costs.
K-12 TAC	Stadium High School	Tacoma School District has Standards manual for all projects.
K-12 TAC	Stadium High School	Project just under way. Note: 1). This project is multiple construction types that does not fit into any category. 2). What does "Date of Alternative Delivery Approval" stand for? 3). Probably should have somewhere to indicate that project is under construction, or in the middle of various phases of design, etc.
K-12 WAHLUKE	New Wahluke High School	In addition to IBC building codes, ASHRAE, UL, and numerous other life safety requirements, the EPA Indoor Air Quality and Schools Health and Safety Guides, are the District specific performance standards incorporated into the A/E specifications during design.
OT SCID PDA	International District Village Square Ph 2	Workmanship, aesthetics, compliance with plans and specifications, systems operability
OT SHA	NewHolly Hope VI Redev. Ph 1	HUD Minimum Property Standards
OT SHA	NewHolly Ph. 2	HUD Minimum Property Standards
OT SHA	NewHolly Ph. 3	HUD Minimum Property Standards
PORT Seattle	SeaTac Parking Garage	Port QC Design Standards
ST Ferries	Anacortes Terminal Relocation	QA/QC compliance will be determined at the end of planning and with the delivery of first design packages.
ST GA	WA Sate Legislative Building Rehabilitation	The quality standards consist of the Capitol Campus Design and Construction Standards, November 1999 edition, which were incorporated into the GC/CM contract, and bound in the GC/CM project manual.
ST GA BCC	Robinswood School Replacement (Bldg R)	These were based on the level of quality of the existing BCC (Bellevue Community College) Campus facilities.

## Appendix S Quality Performance Comments - continued

The following comments are unedited as reported by the survey respondent.

JLARC Agency Code	Project Name	Comments
ST GA Cascadia CC	UW-CCC Bothel Branch Campus Phase I & II	Same as WSU Vancouver
ST GA DVA	WA State Veterans Home	Current project set standards for materials and finishes for planned future projects on the facility.
ST GA-BCC	Robinswood School Replacement (Bldg R)	These were based on the level of quality of the existing BCC (Bellevue Community College) Campus facilities.
ST GA-DOC	Larch & Cedar Creek Corrections Centers Expansions	The contract documents required the GC/CM to have a quality program and individual responsible for it. Contract specifications describe quality standards contractor has to meet. These standards are construction industry standards specific to infrastructure (sitework) and building systems. Building codes and local jurisdiction standards are also required to be met.
ST GA-DOC	Monroe Close Custody Conversion and Repairs	The contract documents required the GC/CM to have a quality program and individual responsible for it. Contract specifications describe quality standards contractor has to meet. These standards are construction industry standards specific to infrastructure (sitework) and building systems. Building codes and local jurisdiction standards are also required to be met.
ST GA-DOC	Special Offender Unit--Expand to 400 beds	The contract documents required the GC/CM to have a quality program and individual responsible for it. Contract specifications describe quality standards contractor has to meet. These standards are construction industry standards specific to infrastructure (sitework) and building systems. Building codes and local jurisdiction standards are also required to be met.
ST GA-DOC	Stafford Creek Corrections Center, Phase 1	The contract documents required the GC/CM to have a quality program and individual responsible for it. Contract specifications describe quality standards contractor has to meet. These standards are construction industry standards specific to infrastructure (sitework) and building systems. Building codes and local jurisdiction standards are also required to be met.
ST GA-DOC	Washington State Reformatory - 400 Bed Addition	The contract documents required the GC/CM to have a quality program and individual responsible for it. Contract specifications describe quality standards contractor has to meet. These standards are construction industry standards specific to infrastructure (sitework) and building systems. Building codes and local jurisdiction standards are also required to be met.

## Appendix S Quality Performance Comments - continued

The following comments are unedited as reported by the survey respondent.

JLARC Agency Code	Project Name	Comments
ST GA-DOC	WCC 97-99 Correctional Industries & Master Control/Infirmary Improvements	With each GC/CM project, a detailed project manual is prepared which include DOC's quality standards.
ST GA-DOC	WCCW Mental Health & Recep.	The contract documents required the GC/CM to have a quality program and individual responsible for it. Contract specifications describe quality standards contractor has to meet. These standards are construction industry standards specific to infrastructure (sitework) and building systems. Building code, local jurisdiction standards and DOC Telecommunications Infrastructure Standards are also required.
ST GA-DOC	WCCW Replace G Units with 256 Bed Housing	The contract documents required the GC/CM to have a quality program and individual responsible for it. Contract specifications describe quality standards contractor has to meet. These standards are construction industry standards specific to infrastructure (sitework) and building systems. Building codes and local jurisdiction standards are also required to be met.
ST GA-DSHS	Special Commitment Center Construction	DSHS utilized DOC standards for Telecommunications systems and perimeter security. Construction was designed to meet LEED basic accreditation requirements, although certification has not yet been sought. Best industry standards were used throughout.
ST UW	Cascade Tower Renovation	Incremental set of internal reviews
ST UW	EE/CSE Phase 2 Expansion	Incremental set of internal reviews
ST UW	Guggenheim Hall Renovation	Project performance standards have still to be evaluated since it is still in Schematic Design Phase
ST UW	Harborview Bond Program	Incremental internal reviews
ST UW	Harborview Research & Training Facility	UW has guidelines that exceeds most of the standard requirements of DPD. Our building are designed for 100 year durations.
ST UW	Hec Ed Pavilion Renovation	Incremental set of internal reviews.
ST UW	IMA Expansion	Incremental internal reviews
ST UW	Johnson Hall Renovation	A/E: Quality Assurance Program
ST UW	New Law School Building	Incremental set of internal reviews



## Appendix S Quality Performance Comments - continued

The following comments are unedited as reported by the survey respondent.

JLARC Agency Code	Project Name	Comments
ST UW	Pacific Tower	Incremental set of internal reviews
ST UW	Surgery Pavilion	Incremental set of internal reviews
ST UW	Suzzallo Library Renovation	Incremental set of internal reviews
ST UW	Tacoma Branch Campus Phase 2B	Incremental internal reviews.

## Appendix T General Comments

The following comments are unedited as reported by the survey respondent.

JLARC Agency Code	Project Name	Comments
CI Seattle	Landsburg Fish Passage & Diversion Facility Improvements Project	Project was successful. It received ASCE design excellence award and AGC construction excellence award.
CI Seattle	Seattle Central Library	Despite challenges, the GC/CM process was successful and a valuable part of the overall outcome. We consider GC/CM to be superior to the traditional design-bid-build approach, and believe it should be retained in state law.
CO King	Brightwater Treatment Facility	Project is in design phase. Construction to begin in 2006.
K-12 EASTMONT	New Eastmont Middle School	The GC/CM process, from the design period through the construction period, is an excellent project delivery method. Initially the Architect was uncomfortable with the process, (there is no A in GC/CM) especially the budget reconciliation process. However, as the project progressed, and the overall quality of the product became evident, their uneasiness was reduced. We were fortunate to have an excellent GC/CM, but I feel the process also brought us some excellent sub contractors and this aided in the overall project quality.
K-12 Lake WA SD	Mann Elementary School	This was a great process for us. The best results occurred during the course of construction; relations with the contractor, job/student safety, and neighborhood fit. Choosing your construction partner well ahead of time, like you choose an architect, is very wise and yielded good quality control and a perception of safety for the school community.
K-12 Northshore SC	Bothell High School, Phase 2	GC/CM is our preferred method for large complex projects, particularly Bothell HS as this is in the middle of an occupied campus with an evolving program (late addition of our non-profit community arts partner). The preconstruction process allows discussions between Owner and GC/CM to schedule and stage work to minimize construction impact to our educational program. Our GC/CM has also created educational opportunities for our students. Also see our response for Northshore JH.
K-12 Northshore SC	Northshore Junior High School	GC/CM is a great opportunity for a school district committed to excellence and an important K-12 tool for the appropriate project. The early team work fosters a creative committed process toward solving problems on complex projects and meeting our District's promises to our community regarding safety, schedule, and budget. The improved communications and better understanding of contractor issues and risks allows our District to be a better Owner for our future projects.
K-12 SEA	Roosevelt High School	Project is currently under construction and information can be updated as more progress is made through the course of the project.

## Appendix T General Comments - continued

The following comments are unedited as reported by the survey respondent.

JLARC Agency Code	Project Name	Comments
K-12 TAC	Stadium High School	Project just under way. Note: 1). This project is multiple construction types that does not fit into any category. 2). What does "Date of Alternative Delivery Approval" stand for? 3). Probably should have somewhere to indicate that project is under construction, or in the middle of various phases of design, etc.
OT SCID PDA	International District Village Square Ph 2	The GC/CM process is an excellent vehicle for non-profit developers to gain financial control on project costs at a very early stage of project development. This minimizes the possibility of huge cost overruns or major redesign costs associated with the design-bid-construct process.
OT SHA	High Point Hope VI Redev. Ph 1	The contract being used on this project is not a true GC/CM. It is a modified form of GC/CM developed by SHA
OT SHA	Rainer Vista Hope VI Redev. Ph 1	Project not complete; Project not a true GC/CM; Numerous legal issues effected Contract release and sequencing of work. This augmented Infrastructure cost constraints; A/E cost included large amount of pre-planning and Land Use coordination.
OT Skagit PDF	McIntyre Hall, Performing Arts and Conference Center	The GC/CM process worked very well on this project, it really creates a team environment!
OT Spokane PFD	Spokane Convention Center Expansion	This project is currently under construction and is less than 50% complete. We are currently about 7 weeks ahead of schedule.
ST Ferries	Anacortes Terminal Relocation	Project is beginning 30% design and is expected to advertise for GC/CM mid February.
ST GA	WA Sate Legislative Building Rehabilitation	This project could not have been constructed to the planned scope and quality, or within the established budget and schedule constraints, by any other means available under Washington State law than the GC/CM alternative delivery method.
ST GA BCC	Robinswood School Replacement (Bldg R)	The total project budget of \$24 Million was made up of a Legislative appropriation and BCC's COP (Certificates of Participation). classrooms (60%) and faculty offices (40%), Building R; a 17,500 GSF pre-manufactured building for Facilities, Building K; and the completion of the campus ring road and required parking lots.
ST GA Cascadia CC	UW-CCC Bothel Branch Campus Phase I & II	Great project team - owner, architect and GC/CM.

## Appendix T General Comments - continued

The following comments are unedited as reported by the survey respondent.

JLARC Agency Code	Project Name	Comments
ST GA DVA	WA State Veterans Home	This project had budgetary problems. The design was not complete, SD's, when the MACC was signed. The design consultant, NBBJ, proceeded through CD's without much, if any, additional reviews by the GC/CM, Mortenson. Details and materials became more and more complex without GC/CM review. Bid packages were let with a resulting \$1.25 million negative buyout. This impacted the GC/CM's contingency from the get go resulting in a budget battle the rest of the way.
ST GA Everett CC	Glacier/Pilchuck & Monte Cristo - Arts & Sciences Building	This project is a combination of construction funding from 03-05 (Monte Cristo) and 05-07 (Glacier/Pilchuck). We are currently finalizing MACC Negotiations for the project.
ST GA Everett CC	Undergraduate Education Center	This project has a completed pre-design only at this time. The design phase is slated to begin in July 05 upon receipt of funding at which time the team will begin the process of seeking approvals for a GC/CM delivery method for the project.
ST GA-BCC	Robinswood School Replacement	The total project budget of \$24 Million was made up of a Legislative appropriation and BCC's COP (Certificates of Participation). The project scope encompassed a 70,000 GSF (gross square feet) concrete building
ST GA-DOC	Larch & Cedar Creek Corrections Centers Expansions	The above information has been compiled primarily from available budget and accounting databases, and from as-built drawing files. The Larch Corrections Center Expansion A/E agreement file was reviewed. GC/CM contract files were not available. The information completed here is the best available at this time. Some interpretations have been made to complete information from available documents which may not reflect the most accurate information.
ST GA-DOC	WCCW Replace G Units with 256 Bed Housing	Project was considered a success by CPD and Institution.
ST GA-DSHS	Special Commitment Center Construction	This was the first institution of its type constructed anywhere in the world. The programmatic assumptions for facility needs had never been tested. Because the facility had to balance security needs with civil rights of the residents, operational programs were invented with only a moderate degree of certainty that they would work. Most systems were successful and only a few required modification after being put in operation.
ST UW	Cascade Tower Renovation	We have changed our database since this project was completed and cannot retrieve the hard files within the time frame required to get this turned in. Therefore, some of the questions could not be addressed.
ST UW	Harborview Bond Program	Contract for construction is being negotiated

## Appendix T General Comments - continued

The following comments are unedited as reported by the survey respondent.

JLARC Agency Code	Project Name	Comments
ST UW	Hec Ed Pavilion Renovation	We have changed our database since this project was completed and cannot retrieve the hard files within the time frame required to get this completed. Therefore, some of the questions could not be addressed.
ST UW	Pacific Tower	We have changed our database since this project was completed and cannot retrieve the hard files within the time frame required to get this turned in. Therefore, some of the questions could not be addressed.
ST UW	Suzzallo Library Renovation	We have changed our database since this project was completed and cannot retrieve the hard files within the time frame required to get this turned in. Therefore, some of the questions could not be addressed.
ST UW	Tacoma Branch Campus Phase 1A	This projects is very old and the files are in Archives
ST WSU	ELSB Vancouver	Because this project was completed nearly 10 years ago and the project manager is no longer employed by WSU, I will need to research some of the bid package particulars from our archives. I will update that section of this report and resend as soon as possible.